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OBSERVATIONS

ON THE

CHANGES of the AIR

AND THE

Concomitant Epidemical DISEASES,

IN THE

Iſland of BARBADOES.

To which is added

A Treatiſe on the putrid bilious FEVER,

Commonly called

The YELLOW FEVER;

And ſuch other DISEASES as are indigenous or endemial, in the WEST INDIA ISLANDS, or in the TORRID ZONE.

By WILLIAM HILLARY, M.D.

The SECOND EDITION.

LONDON:
Printed for L. HAWES, W. CLARKE, and R. COLLINS,
in *Pater-noſter-row.*
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THE PREFACE.

THE *following Observations on the Changes of the Air, and Variations of the Weather, were made in the Island of* Barbadoes, *with Care and Exactneſs, and are truly related.*

The Degrees of the Heat, or the Coolneſs, of the Air, were obſerved by Fahrrenheit's Mercurial Thermometer, *made at Amſterdam, every Morning at or before the Riſing of the Sun, and again between the Hours of Twelve and One o'Clock at Noon. And the Height of the Mercury in the Barometer was obſerved at the ſame Times, tho' I have only recorded its Station at Noon; and I ſhould have begun theſe Obſervations ſome Years ſooner, if an Accident had not deprived me of my Barometer; but if I had known that the Variations in it had been ſo very little, within the Torrid Zone, as I found them afterwards, I ſhould have made*

them without it; as the greateſt Variation in it, in ſix Years time, was never more than four Tenths of an Inch, viz. from twenty-nine ſix Tenths of an Inch high to thirty Inches. I alſo made uſe of a Hygrometer to obſerve the Degrees of Moiſture and Drineſs of the Air, but found its Variations to be ſo immaterial, except when the Rains fell, and were viſible to our Senſes, as not to be worth recording; eſpecially as the Quantity of Rain which fell in each Month is recorded: But as it is obſerved that much more Rain uſually falls in mountainous Places, than in flat, low, level Countries, and Bridgtown *being on a level Plain, and they often had Rain on the Hills when we had little or none; and my worthy and ingenious Friend* Andrew Dury, *whoſe Seat is on the riſing Hills near the Medium between them, having carefully meaſured the Quantities of the Rain which fell in each Month, for ſome Years, and reduced it into cubic Inches and the decimal Parts of an Inch in its Depth; his Obſervations and Meaſurement, where he is ſituated, may be taken as a Medium for the whole Iſland; and he readily obliged me with a Table of the Quantities of Rain which fell in ſix Years, for which I now return him my grateful Acknowledgments. And I think that the*

Changes of the Air and Weather, as well as the Quantity of Rain falling, may be depended on, as being very exact.

So likewiſe the Succeſſion, as well as the Variations of the concomitant epidemical Diſeaſes, were as carefully obſerved in my Practice, at the ſame time, and recorded at the End of each Month; that I might, if poſſible, obſerve, how thoſe Diſeaſes were either influenced, cauſed, or changed, by thoſe Variations of the Weather; which when they were evident, material, or important, I have occaſionally obſerved and remarked; as alſo ſuch Variations, either in the Method of curing thoſe Diſeaſes, or ſuch Alterations in the Medicines given, as I found were neceſſary, and the Succeſs they had; all which I have endeavoured carefully to relate. I do not here mean ſuch Alterations, either in the Methods of Cure, or in the Medicines, or their Doſes, as are neceſſary to be made, in different Patients, or different Ages and Conſtitutions; as the Difference between a Patient who has ſtrong, rigid, and elaſtic Solids, and a denſe Blood; and one who has a delicate, ſlender, or a relaxed weak State of his Solids, and a lax, looſe unconnected State of the Globules of his Blood; nor the Difference between one who has

a viſcid, ſizy, or buff-like Blood, from one who has a lax, putreſcent, diſſolved State of Blood; for all theſe different Conſtitutions may poſſibly have the ſame epidemical Diſcaſe, at the ſame time, but with different Symptoms, and may require different Methods of Cure, both as to the Quantity of Bleeding and other Evacuations, as well as different Medicines, tho' it be the ſame Diſeaſe, and ariſes from the ſame epidemical Cauſe; as every judicious Phyſician knows. But I mean ſuch Changes in Diſeaſes, as ariſe from the Variations in the Weather, and either produce different Symptoms in the ſame Diſeaſe, or ſuch as may determine the morbid Matter to a different Part of the Body; or laſtly to be carried off by a different critical Diſcharge, than it was before; all which ſhould be carefully obſerved by the attending Phyſician, and Nature ſhould always be aſſiſted by him, to effect ſuch Ways and Methods as ſhe indicates and endeavours to do, if it can be done; theſe I have endeavoured to obſerve: as alſo when thoſe Changes in the Weather have either put an end to the then reigning epidemical Diſeaſes, or have produced ſome other Diſeaſes which did not appear before; and when theſe Changes were any way conſiderable, or of any Importance,

tance, I have taken care to mention them, as well as ſuch Changes in the Methods of Cure, or in the Medicines, as I found neceſſary to be made, eſpecially thoſe which I found to be the moſt ſucceſsful.

Though I have given but few or no Formulæ *or* Preſcriptions, *becauſe the ſame Form or Preſcription can but ſuit a few Patients, or Conſtitutions, without ſome Alterations in them* pro re nata; *and therefore could not be of much Service to ſuch Practitioners as are qualified either to preſcribe, or adminiſter any Medicines; and a Preſcription to the Judicious is unneceſſary, becauſe, as the great* Hippocrates *ſays,* He who knows the Diſeaſe, knows what is proper to cure it. *And as for thoſe who will neither read, nor yet know how to reaſon on the Cauſes, or the manner of their Production of Diſeaſes, and yet will boldly practiſe by rote, and preſcribe by gueſs at a Venture, though the Life of the Patient depends on the right or wrong Method of preſcribing; I muſt, with the learned and judicious Dr.* Huxam, *ſeriouſly adviſe them, at leaſt to peruſe the ſixth Commandment.*

Books Printed for L. HAWES, W. CLARKE, and R. COLLINS, *and lately publiſhed.*

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Theſe four by Mr. PERCIVAL POTT, F. R. S. and Senior principal Surgeon to St. *Bartholomew's-Hoſpital.*

INTRODUCTION.

THAT wiſe Father and Prince of Phyſicians, *Hippocrates* *, adviſes all Phyſicians to examine and duly conſider the Situation, Air, and the Water, uſed by the People of ſuch Cities, or Places, as they are called to, or may practiſe in. It is therefore neceſſary that I ſhould ſay ſomething concerning the Situation, Air, Water, *&c.* of this Iſland, before I give an Account of the Obſervations made on the epidemical and endemial Diſeaſes in it, at leaſt for the Satisfaction of ſuch of my Readers as are Strangers to it.

BARBADOES is a ſmall Iſland, near 26 Miles long, and near 14 broad, ſituated in the Weſt-Indies, in Lat. 13 N. and Long. 59 W. from London, and is one of the Caribbee Iſlands. It is moſt of it pretty high rocky dry Land; the Soil is uſually about two Feet deep, in ſome Places leſs,

* Hippoc. de Aere, Aquis et Locis.

in others more, and moſtly conſiſts of a blackiſh Mould, in ſome Places red. It has but few Springs of Water, and only one Rivulet which deſerves that Name: no marſhy or wet Lands of any Importance, the whole Iſland being in general rocky and dry; yet the Inhabitants have Plenty of good Spring-water, by digging into the Rock, all over the Iſland, though it is moſt commonly a little hard: The Rock is in general compoſed of a ſoft porous white Freeſtone, in ſome Places a Lime-ſtone; in others it conſiſts of Brain-ſtones, Aſtroites, and ſtalactite Concretions. In the North-eaſt Part of the Iſland there are Mun-jack Pits, from which the Petreoleum, called *Barbadoes Tar*, is gotten, and near them Iron-ore is found. The Air is generally pure, ſerene, and dry, except in the rainy Seaſons, but always very warm.

The Inhabitants who live temperately, and are prudent in the Uſe of the ſix Non-naturals, if they have tolerable good natural Conſtitutions, live to as great an Age as the Europeans. Some have died here lately, who were above a hundred Years old; but thoſe who live irregularly, and are too free in the Uſe of vinous and other ſpirituous Liquors, generally haſten their End more expeditiouſly, than they who live in the ſame manner in Europe. But I muſt obſerve, in Juſtice to and Honour of the Fair-

ſex,

ſex, that they all in general are exceeding temperate, and very few or any of them drink any thing but Water, and generally live to a good old Age.

The Europeans and North-Americans, from the colder Parts of it, and eſpecially the Britons, when they firſt come to this or the other Weſt-India Iſlands, are, by the great increaſed Heat of the Climate, uſually not long after their Arrival there ſeized either with a Fever, or with a Sort of ἐχθύματα Efflorescences, which moſt commonly firſt appear on the Legs, in pretty large hard Lumps of a rediſh Colour, which are ſometimes as large or larger than a Shilling, but of any irregular Figure, and itch violently, eſpecially towards Night, if they are either rubbed or ſcratched; and from doing which it is difficult to refrain, though doing either much increaſes both the Itching and their Swelling, and often either rubs the Cuticle off, or cauſes little Bliſters to riſe, and a ſaltiſh yellow Serum to ouſe out, which makes them ſmart; after which a Scurff or Scab enſues, which after a few Days fall off: Theſe Lumps commonly riſe on the Hands, Arms, Legs, Thighs, Neck, and Face, and uſually continue three, four, or five Days, then turn to a yellowiſh Colour, and ſoon after diſappear; but are ſoon ſucceeded by others in or near to the ſame Places, and ſo con-

tinue ſucceſſively for ſeveral Weeks, or Months, in moſt Strangers which come into this hot Climate.

Theſe exanthematous Eruptions, are vulgarly but erroneouſly aſcribed to the ſtinging or biting of the Muſquetoes. It is certain that theſe Inſects do bite, and that little Lumps or Swellings will riſe where they bite, but theſe are neither ſo large, nor do they uſually continue ſo many Hours, as the other Lumps do Days: Theſe being only the Bite of a ſmall Inſect, which is not more offenſive than the Bite of the Midge in England; whereas the other are Efflorescences caſt out by Nature, or the Vis Vitæ, and proceed from the great increaſed Heat of the Climate, which continuing rarifies and expands the circulating Fluids, and ſo exalts, ſemivolatiliſes, and alkaliſes their natural ſoft, mild, ſemiammoniacal neutral animal Salts, as to render them very acrid, and unfit to paſs through the ſmall ſubcuticular Veſſels and ſecretory Pores, without obſtructing them, and producing thoſe troubleſome itching Tumours.

Whilſt theſe Efflorescences continue, there are alſo other but ſmaller eruptive Puſtulæ, or little red Pimples, which ariſe from the ſame Cauſe, often come out all over the reſt of the Body, called ἰδρῶα by the Greeks, *Eſſera* by the Arabians, *Sudamina* by the Romans, and the Prickly-heat

by the Engliſh, which cauſe great Itching and Pricking, as if with ſmall Needles: This uſually continues ſeveral Weeks, and in ſome Perſons for ſome Months, in the hotter Months, and then declines, and cauſe the Cuticle to fall gradually off in ſmall white Scales. This Prickly-heat ſeizes moſt of the Inhabitants, both Natives and Strangers, either in a greater or leſſer Degree, every Year during the hot Summer-months. It ſeldom cauſes any Sickneſs or Diſorder, except the troubleſome Itching and Pricking, but every one goes about his Buſineſs with it, as if he was well; unleſs it be imprudently repelled and ſtruck ſuddenly in, either by rubbing it with Lime-juice, Vinegar, camphorated Spirits, or by waſhing the Body with cold Water, which ſome are ſo imprudent as to uſe, to take that troubleſome itching and pricking Heat off, whereby they have repelled thoſe acrid ſaline Humours into the Blood again, when kind Nature had thus caſt them out, and ſo have produced a Fever, which has ſometimes been attended with bad Conſequences. For going into a cold Bath, or the Sea, is not ſo bad or dangerous in this Caſe, as waſhing the Body with cold Water is; for though the Humour may be repelled, whilſt they are in the Cold-bath, yet the glowing Heat which uſually follows it, ſtrikes it more effectually out again after, which

waſhing with cold Water does not. The beſt Method is to live temperately, uſe moderate Exerciſe, and encourage the Eruption by taking ſmall warm Liquids and Nouriſhments, as Gruel, Tea, Coffee, Wine-whey, Broth and plain Meats; and to avoid ſuddenly expoſing themſelves when warm to a Current of cool Air, Night-dews, and damp wet Places, and the too freely drinking ſpirituous Liquors, as they increaſe this as well as inflammatory Diſeaſes.

For I have obſerved, that not only the yellow Serum which thoſe little Tumours or Bliſters ouſe out, but the common Sweat, even of Perſons who are well, when taſted in this hot Climate, is ſo very ſalt and acrid, that it taſtes like the Salt or Spirit of Hartſhorn mixed with Water in a conſiderable Proportion, which being retained in or repelled into the Blood, muſt attenuate and diſſolve it, and ſtimulate the Solids alſo, and produce not only this depuratory Fever, but if continued, the yellow putrid Fever, or other putrid Fevers alſo.

Moderate Bleeding, and a free Uſe of gentle acid Antiphlogiſticks, and ſometimes ſome other Evacuations, and encouraging a free Diaphoreſis, generally takes this Fever off; but a great Languor, and want of Spirits and Strength, often continue for ſome time after it. And it is remarkable, that in this hot Climate the

Sick ſeldom recover from any Fever, or other Sickneſs, ſo ſoon as they uſually do in England, or other colder Countries.

Notwithſtanding that the Air is generally clear and ſerene, (except in the rainy Seaſons) yet the Heat is generally ſo great, as never to cauſe the Mercury in *Fahrenheit's* Thermometer to fall lower than 70 Degrees, in the cooleſt Mornings, or higher than 86 in the Day time; yet as the greater Degree of Heat uſually continues eight or nine Months in the Year, it muſt greatly relax the animal Fibres, eſpecially when it is accompanied with Moiſture, as in the rainy Seaſons, and give a putreſcent Diatheſis to the Fluids, both which muſt greatly tend to attenuate and diſſolve the circulating Fluids: And it is obſerved, that the Blood in general is much more lax, looſe, and attenuated, even in Health here, than it is in England: Hence the Diſpoſition to putrid Fevers, and other Diſeaſes from thence ariſing, may be ſeen. But this lax State of the Fibres has its Advantages in this Climate, as well as its Diſadvantages: For if the Fibres were not thus relaxed, but were to continue in that elaſtic active State, which they are uſually in, in colder Countries, every extraordinary Motion and Exerciſe, accompanied with that great Heat, would bring on a Fever of the inflammatory Kind, with greater or leſs Violence, as theſe pro-

cataractic Cauſes were greater or leſs. But let us not imagine, that a general Relaxation of the Solids attends every one, in the ſame Degree, becauſe the ſame Degree of Heat equally affects all; for ſome are much more relaxed than others from the ſame Cauſe, and different Conſtitutions differ as much here as they do in England, or elſewhere, though none may have their Solids ſo elaſtic here, as the ſame Perſon would have them there.

Having ſaid thus much on the Climate, and the Effects of the Variations of the Weather on the human Body, I muſt make ſome Remarks on the Cuſtoms of the Country, particularly on thoſe which do, or may affect the Health of the Inhabitants.

I am well informed, that it was the Cuſtom of the firſt Comers hither, to wrap and ſwaddle up their new-born Infants in Linen and Flannel in this hot Climate, as they did in England, by which it is probable that ſeveral of them muſt have loſt their Lives innocently and ignorantly; and thoſe who were ſtrong enough to ſurvive it, muſt have been ſo relaxed and weakened by it, as to render them weak and ſickly a great part of, and ſome of them all, their Life-time after. But this Practice is, in a good meaſure, left off, though not near ſo much as it ſhould be; for the Midwives and Nurſes ſtill continue to uſe a great deal more

more Clothing and Wrapping than is proper, and do not uſe Waſhing and Bathing their Infants in cold Water, near ſo much as they ſhould, whereby many are rendered ſickly, weak, tender, and pale, all, or a great Part of their Life-time after. Whereas, if they uſed cold Bathing in a proper manner, not only to Infants, but all others, except the very ancient People, it would greatly contribute not only to brace up and ſtrengthen their relaxed Solids, but to prevent all thoſe Diſeaſes which ariſe from thence: And we find that all the Eaſtern warm Nations uſe cold Bathing frequently, if not daily, and no doubt have found the Benefit of it for many Ages paſt; and if the Inhabitants of the Weſt-India Iſlands would follow the ſame Practice, they would find the ſame Advantage from it alſo.

Faſhions and Cuſtom are two prevailing Things, which inſlave the greateſt Part of Mankind, though often both contrary to Reaſon and Conveniency, and particularly in our Dreſs: For no doubt but the looſe cool eaſy Dreſs of the Eaſtern Nations, a thin looſe Gown or Banjan, is much eaſier, and better fitted for us in the hot Climate, than the Engliſh Dreſs; and all who have tried both find it ſo: But ſuch is the Influence of Faſhion and Cuſtom, that I have ſeen many Men loaded, and almoſt half melting,

melting, under a thick rich Coat and Waiſt-coat, daubed and loaded with Gold, on a hot Day, ſcarce able to bear them, little conſidering how much they injured their Conſtitutions thereby, as well as their being troubleſome.

A Banjan is the Dreſs of the *Mandareens*, and at the Courts of China, Japan, Indoſtan, and Perſia, and ſome other Courts; and why it may not be ſo at Barbadoes, and the other hot Iſlands, I ſee nothing but Cuſtom to hinder it: And if any one cannot part with his Finery, and thinks the Character of a Fop preferable to that of a Man of Senſe and Honour, he may daub his Banjan with as much Gold as he pleaſes. But after all, I think it is the moſt convenient Dreſs in all hot Countries, and the beſt ſuited to preſerve their Eaſe and Health.

I muſt alſo ſay ſomething of Exerciſe, as that when prudently uſed contributes much to the Preſervation, and in ſome Caſes to the Reſtoration of Health. But as no rural Diverſions, ſuch as are uſed in England, can be followed here, becauſe we have little or no Game, and if we had the Country is too hot to purſue them; wherefore Riding, Walking, and Dancing, are the only Exerciſes here uſed: The two firſt, when taken in Moderation, at ſuitable Hours, viz. Mornings and Evenings, when the

the Air is a little cooler, do no doubt contribute much both to the Preſervation and Reſtoration of Health in ſome Caſes, as alſo does Navigation in ſome others; but Dancing is much too violent an Exerciſe in this hot Climate, and many do greatly injure their Health by it, and I have known it fatal to ſome; neither is it uſed in the Eaſtern hot Countries: But moſt of the Ladies are ſo exceſſive fond of it, that ſay what I will they will dance on.

As to the Diſeaſes of this and the other Weſt-India Iſlands, there are ſeveral both acute and chronical, which are indigenous or endemial in them, and probably to ſuch other Countries as are ſituated within the torrid Zone, which are ſcarce ever ſeen, and are but little known in England, or the other European Nations. I have endeavoured carefully to obſerve thoſe Diſeaſes, and ſtrictly enquired into them, and ſhall delineate them in ſuch a manner, that they may be known when ſeen by thoſe who have not ſeen them before. I have alſo recommended ſuch Methods of Cure as I have found to be the moſt ſucceſsful, as alſo the manner of giving thoſe Medicines which I have found to be the moſt efficacious in their Cure; and I have added ſome *Formulæ* or *Preſcriptions* in the Second Part, for the Benefit of ſuch young Practitioners as may not be acquainted with

the

the uſual Method or Manner of giving them. But I muſt obſerve, that neither theſe, nor any other *Formula* or *Preſcription* that can be given, can no more ſuit all Conſtitutions or Caſes in the ſame Diſeaſe, than one Coat can be made to fit all Men; for theſe muſt be varied according to the different Cauſes, Circumſtances, and Natures of the Symptoms of the Diſeaſe, as well as to the different Ages, Strengths, and Conſtitutions of the Patient, by the judicious Phyſician, as he may ſee neceſſary.

In the firſt Part I have given an Account of the Weather, and all its material Changes, as I obſerved them by *Fahrenheit*'s mercurial Thermometer, and a common portable Barometer, and alſo have given an Account of the Quantities of Rain which fell in each Month and Year, and the other viſible Changes in it; and an Account of all the concomitant endemial and epidemical Diſeaſes, and ſuch Variations as happened in them, as were any way remarkable or material, together with their Indications and Intentions of Cure, generally taken *ex ipſa re & ratione*, and ſuch Methods and Medicines as I found to be the moſt ſucceſsful in their Cure. And I have remarked wherein thoſe Diſeaſes differed from the ſame Diſeaſes in England, when any ſuch happened to appear, that were any thing

thing material or remarkable, either ariſing from the Heat, or other Variations of the Climate; as alſo ſuch Variations as I found it neceſſary to make, either in the Method of treating thoſe Diſeaſes, or in the Medicines, when it was different from the Method of treating them in England; and I have mentioned ſuch as I found to be the moſt ſucceſsful, in as plain, clear, and full a manner as I could, without being too tedious, in order to adapt it to the Capacity of the Unlearned, as too many of the Apothecaries in this Part of the World are too much ſo, that it may be more generally uſeful to Mankind, and in particular to the Inhabitants of the Iſland of Barbadoes, for whoſe Benefit and Service I have chiefly taken all this Labour; and I ſincerely wiſh that this Performance may be as uſeful and beneficial to them, and all the other Weſt-India Iſlands, as either they or I can deſire.

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The three laſt by Browne Langriſh, of the College of Phyſicians in London, and Fellow of the Royal Society.

OBSERVATIONS

ON THE

CHANGES of the AIR, &c.

THE Months of March, April, and May, were more than uſually warm and dry, little Rain falling in all that Time, inſomuch that the whole Quantity which fell in theſe three Months, was only equal to 1.22 cubical Inch deep. A. D. 1752.

And the loweſt that *Fahrenheit*'s Thermometer was at Sun-riſe was in the Month of March at 74, and the higheſt in the Morning at 78, and the loweſt at Noon was at 80, and the higheſt at Noon was 82. In April the loweſt in the Morning was 76, and the higheſt in the Morning at 79, and the loweſt at Noon was 81, and the higheſt at Noon was at 82. In May the loweſt in

in the Morning was 77, and the higheſt in the Morning at 81. And the Barometer in theſe three Months was 29.8, the higheſt 29.9.

During this warm dry Seaſon, inflammatory Diſeaſes were very frequent, chiefly Ophthalmies, Quincies, Peripneumonies, and Pleuriſies; in all which the Pulſe was moſtly full quick and hard, and their Blood generally inflamed; and in moſt it was covered with a Starch or Buff-like inflammatory Pellicle: But I muſt obſerve, that their Blood in theſe inflammatory Diſeaſes, is very ſeldom ſo much ſizey or buff-like in this warm Climate, as it uſually is in England, when the Pain and Height of the Inflammation, and the other Symptoms are nearly the ſame*.

Theſe generally required larger Bleeding than in moſt other Years, unleſs equally hot and dry; but by bleeding pretty freely, and a liberal Uſe of antiphlogiſtic Medicines, with Sal. Nitre and crude Sal. Ammoniac, as hereafter mentioned, and diluting plentifully, they were generally relieved; and I found emollient Fomentations, with crude Sal. Ammoniac, were of great Service.

The

* *Query.* Does not this Difference moſt probably ariſe from their Solids here being more relaxed by the Heat of the Climate, than they are in England? Whence their Fluids are more lax, and more readily attenuated, or diſſolved, by the alkaline Acrimony of the ſemivolatilized animal Salts.

The Small Pox alſo were epidemical at this Time, but were in general of the diſtinct Kind; and thoſe few who had the confluent Sort, were generally of a good Kind, notwithſtanding that the above inflammatory Diſeaſes were then epidemical.

The Beginning of June was alſo very dry and warm; but from the Middle of it to the End of it, and during the Months of July and Auguſt, we had frequent and much Rain.

The Quantity of Rain which fell in June was=to 10.03 cubic Inches deep. The loweſt that the Thermometer was in the Mornings was at 77, and the higheſt it was at or before Sun-riſe in the Morning, was 80. The loweſt it was at Noon was at 82; and the higheſt at Noon was 84.

The Quantity of Rain which fell in July, was=to 8.48 cubic Inches deep; and the loweſt that the Thermometer was at in the Mornings was at 78, and the higheſt that it was at in the Mornings was at 80. The loweſt it was at Noon was at 82, and the higheſt at Noon was 86.

The Quantity of Rain which fell in the Month of Auguſt, was=to 8.72 Inches deep. The loweſt the Thermometer was in the Mornings was at 79, and the higheſt that ever it was in the Mornings was at 82. The loweſt it was at Noon was 83, and the higheſt at Noon was 86; and the loweſt that the Mercury fell in the Barometer in theſe three

Months was to 29.8, and the higheſt that it ever did ariſe to was 29.9.

Upon the falling of thus much Rain, the Face of the Earth which was much parched and burned brown before, ſoon became green and pleaſant; as Vegetation is very ſtrong and quick here, whenever much Rain falls.

Upon this Change of the Weather from very dry to very wet, Dyſenteries became very frequent and epidemical; as they do uſually every Year upon much Rain falling at this Time of the Year, and ſeized many both white and black People, but eſpecially the latter, who are often but little clothed, and more expoſed to the Inclemency of the Weather, and ſome of them but poorly fed. We had ſtill ſome few Pleuriſies and Peripneumonies, but theſe became leſs frequent, and the Quincies and Ophthalmies ceaſed to appear upon the falling of the Rain.

A Cholera Morbus alſo ſeized ſeveral, but I think its Symptoms are leſs violent here, than they uſually are in England: And ſome were ſeized with Apoplexies and Palſies, and ſome of the Firſt died before any proper Aſſiſtance could be called in.

Many Children were ſeized with an Aphthous Fever*, in which the Aphthæ were moſt

* *Query.* Was not both the Dyſentery and this Aphthous Fever, cauſed by the falling of ſo much Rain, and rendering the Air cooler, by which the great Perſpiration

moſt commonly of the white or yellowiſh Kind, and rarely black, or of a bad Kind, unleſs they were wrong treated; it uſually came on with a moderate Fever, a quick but not very high Pulſe, and was attended with a Diarrhœa, but not much Pain in the Bowels; and as Dyſenteries were then frequent, ſome ignorant Practitioners treated it as ſuch, and gave them ſtrong Reſtringents (tho' not good Practice in that caſe) which increaſed the Fever and Inflammation of the Bowels, and brought on a Mortification which proved fatal. But when this Fever was treated with ſmall Doſes of Rhubarb with gentle Anodynes, to carry off the acrid Humours, and abate the Irritation and Pain, and gentle Antiphlogiſticks with Anodynes, to take off the Fever, and reſtrain or prevent the too violent Purging; and then giving ſoft, ſmooth,

 healing

tion and Sweating, cauſed and continued by the long continued Drineſs and Heat before, being ſuddenly abated and ſtopped; were they not now turned upon the Bowels, and the Humours being rendered acrid by that Heat, ſo produced theſe Diſeaſes? And,

Query 2. Were not the Apoplexies and Palſies alſo produced by the ſame Cauſes, viz. a Diminution or Stoppage of Perſpiration and Sweat, by which a Plethora or Fulneſs, and the Quantity of the circulating Fluids was too much increaſed, and the Veſſels of the Brain making the leaſt Reſiſtance, the Fluid too violently diſtended or broke them; as no other Evacuations were ſufficiently increaſed to carry off that Plethora; either from a want of more Acrimony in the Fluids, or too great a Relaxation and Inability of the Solids, to produce ſuch Evacuation.

healing Balſamicks, as *Sperm. Cet. Cremor. Lactis*, or the *Wax Emulſion*, with a little *Syr. Meconio*, to heal the *Primæ Viæ*, they generally recovered. As the morbid Humours, being rendered acrid by the preceding Drineſs and Heat, and now being turned upon the Bowels, by the cooler Rain ſtopping or diminiſhing the free Perſpiration and Sweating; it was neceſſary to aſſiſt Nature to diſcharge thoſe acrid Humours, by ſuch ways as ſhe indicated, and not to hinder her; tho' it might be neceſſary to prevent the Evacuation from being too violent, or too ſudden and great.

The Month of September continued to be very wet, and more cool than the preceding Months, tho' we had ſome calm hot Days in which we had much Thunder and Lightning, and much Rain.

The Quantity of Rain which fell in this Month, tho' it had but 19 Days in it, by reaſon of the Change of the Style made this Year, and begun in it, was=to 7.89 cubic Inches deep; and the loweſt the Thermometer was in this Month in the Morning was 79, and the higheſt it was in any Morning was at 84; the loweſt it ever was at Noon was 82, and the higheſt was at 86. The Barometer was never lower than 29.7½, nor higher than 29.9.

A Catarrhous Fever ſeized ſeveral People in this Month; they at the firſt complained of a Pain in their Head, and all over in their Limbs,

Limbs, accompanied with a violent Cough, by which a thin acrid Phlegm was expectorated, tho' but little in Quantity, and brought up with much Difficulty; ſome had a briſk Fever with it, others had only a ſmall Fever, their Pulſe ſmall, quick, and low, and in ſome a little languid, and their extreme Parts rather cold than warm, ſometimes with fluſhing Heats, and then cold again, and ſometimes ſhooting, darting Pains, which were ſoon over, and often returned again.

Bleeding thoſe who were more plethoric and the Fever higher, with Pectorals and Antiphlogiſticks and a few Volatiles, generally took it off; but more attenuating and warmer Pectorals, with a more liberal Uſe of Volatiles, as alſo Veſicatories, were neceſſary to thoſe who were more low and languid, and where the Pulſe and Fever were lower, were of great Service and generally ſucceſsful; and the Dyſentery ſtill continued to be epidemical, and we have had ſome few inflammatory Diſeaſes ſtill, tho' but few of theſe now.

The Month of October continued to be very wet, and much cooler than uſual at this time of the Year. The Quantity of Rain which fell in this Month, was = to 12.14 cubical Inches deep; and the loweſt that the Thermometer was in any Morning in it, was 78, and the higheſt that it roſe to in any Morning was to 82. The loweſt it was at

Noon was 81, and the higheſt at Noon was 85: And the loweſt the Barometer was at 29.8, and the higheſt was at 29.9.

The Weather continuing to be wet and cool, ſeveral were ſeized with an irregular, ingeminated, intermitting, quotidian Fever; which at the firſt generally put on the Appearance of a continued remitting Fever, but in two or three Days time uſually changed to an ingeminated Quotidian, with all the Symptoms of that Fever, as uſual in England*.

When this Fever was treated by bleeding once, and an Emetic after it, at a proper Diſtance; and then with ſaline, ſaponaceous Draughts after that; as *Sal. Abſinth. Succus Limon.* &c. or rather with *Sal. Abſinth.* brought to a neutral State with *Elix. Vitrioli Acid. q. ſ.* in a little *Aq. Menthæ*, &c. which I found to be better in this Caſe, the Fever was generally carried quite off by a critical Sweat on the Seventh or Ninth Day; or in ſome few it came to intermit regularly after that time, and then was ſoon cured by the *Cortex Peruv.* given with the above ſaline Draughts, and rarely effectually without them. Though theſe irregular ingeminated Fevers often remitted, and ſometimes ſeemed

* *Query* 3. Were not theſe irregular remitting or intermitting Fevers, as well as the preceding Catarrhous Fever, produced by the Continuance of the moiſt, wet Seaſon relaxing the Solids, and rendering them leſs active, and a Diminution of the Perſpiration and Sweat at the ſame Time?

ſeemed to intermit, yet if the *Cortex Peruv.* was given too ſoon in the Diſeaſe, before it intermitted regularly (as I have more than once ſeen where it had been injudiciouſly given) it generally cauſed the Fever to become continual, and *mali Moris*; which ſometimes produced Obſtructions in ſome of the Glands of the Viſcera, or elſewhere, which were irremoveable, and either ended in a Suppuration, or a Mortification of the Part, as I have ſeveral times ſeen and predicted, that it would be ſo; as the learned Dr. *Boerhaave* very judiciouſly obſerves.

The Symptoms of this Fever here, were much the ſame as they uſually are in the συνεχεῖς, or continued remitting Fever in England; except only, that the Urine in this hot Climate, never depoſits any latericious Sediment in this Fever, nor very rarely in any intermitting, or any other Fever, except ſometimes when a Criſis happens that way, as it is commonly obſerved to do in England; where a latericious Sediment in this Fever generally denotes the Fever either to intermit, or ſo far to remit, that the *Cortex Peruv.* may be ſafely given with Succeſs; but not ſo here.

I muſt obſerve, that intermitting Fevers, eſpecially Tertians and Quartans, are very rarely or never ſeen in this Iſland now, unleſs they are brought hither from ſome of the Leeward Iſlands, or ſome other Places which

are leſs cultivated, and not yet cleared of the Woods; where intermitting Fevers are ſaid to be much more frequent, and are often attended with Obſtructions of the Glands of the Viſcera; and when injudiciouſly treated, and the *Cortex* too haſtily given before the Obſtructions are removed, they are frequently thereby rendered irremoveable, and are changed into chronical Diſeaſes, which are at the beſt extremely difficult to be cured, or too often become fatal.

Some were ſeized with Ophthalmies, and ſeveral with Tumors about the Jaws, Neck, and Head; others were ſeized with a moderate Fever at the firſt, attended with a dull heavy Pain in the Head; the Pulſe was quick, but low and oppreſſed, tho' no great degree of Heat attended it, yet in a little time they became delirious, and inſenſible of their Condition; their Strength ſoon ſunk, uncommonly, and a Stupor came on which gradually increaſed, and took them off in four or five Days time; as if all the vital Springs were ſtopped at once by the Afflux of the Humours upon the Brain*. Neither did Bleeding, or other Evacuations downwards, ſeem to make that Revulſion, or give that Relief,

* *Query* 4. Were not thoſe Humours which produced thoſe Tumors and Swellings in the others, turned or caſt upon the Brain or its Meninges, in theſe, and produced theſe Effects? As the Humours ſeemed to have an unuſual Tendency and Afflux towards the Head at this Time.

Relief, which they uſually do in ſimilar Caſes; nor was the Uſe of Volatiles, &c. or Veſicatories of that Service as they generally are in ſuch Caſes.

The Rain ſtill continuing, the before mentioned inflammatory Diſeaſes totally diſappeared; but the Dyſenteries ſtill continued to be very frequent and epidemical, ſeizing many of the Negroes and ſeveral of the white People alſo: In ſome it came on gradually, with little or no Fever at the firſt, nor any violent Symptoms, but the Stools became more and more frequent, and the Fever gradually increaſed, though ſome had not much external Heat, yet inwardly were feveriſh and hot: In others the Fever came on ſooner, and with more acute Symptoms, and the Griping and Pain were great, the Pulſe very quick, and in ſome full: They generally had a Sickneſs and a Load, or Loathing at their Stomachs, Pain in their Heads, and often all over the Body; not much Griping at the Beginning, but it gradually increaſed, and became ſevere and painful, eſpecially before going to ſtool; great Quantities of Blood were generally diſcharged that Way, and a bloody Mucus after it: And as the Diſeaſe advanced, moſt of the Symptoms increaſed, and ſometimes a Singultus, with a Coldneſs of the extreme Parts came on, which are always in this Diſeaſe very bad, and ſometimes fatal Symptoms, and if not timely relieved,

too often prove mortal. Alſo as the Diſeaſe increaſes, a terrible Teneſmus comes on, and increaſes ſo as to be very painful, and often will continue ſeveral Days, even after the Frequency of the Stools is abated.

This Diſtemper may be truly ſaid to be Endemial in the hot Climate, and this Iſland, as we have it more or leſs every Year, when the rainy Seaſons come on: As the heavy Rains which uſually fall at thoſe Times, and the Coolneſs and Moiſtneſs in the Air which they produce, too ſuddenly check and ſtop the Diſcharge by Perſpiration and Sweat, which in this warm Climate are uſually very great, the Humours are thereby too ſuddenly turned upon the Bowels; to which may be added as a concomitant Cauſe, their too freely eating the Herbs, Roots, and Fruits of the Earth, which are too haſtily and luxuriantly produced in this warm Climate, upon the falling of ſuch Rain, and are then crude and wateriſh, which the Negro Slaves too voraciouſly devour; and who are at the ſame time too much expoſed to the Inclemencies of the Weather, and hard Labour in the Fields, and ſome of them ill-cloathed; all which jointly contribute to produce this Diſeaſe: And I have obſerved that the Negro Slaves are generally the firſt ſeized with ſuch Diſeaſes as are epidemical or endemial in this Iſland.

As

As this Diſeaſe is always attended with a Fever in a higher or lower Degree, and is cauſed by too ſudden a Stoppage or Diminution of Perſpiration and Sweat, which are turned upon the Inteſtines, with ſometimes the Addition of infectious Effluvia from others labouring under it, where the Humours become more acrid and irritating by the Heat of the Body; they produce an *Inflammation* on the *Tunica Villoſa Inteſtinorum*, in a greater or leſs Degree, which being increaſed by the Continuance of the Diſeaſe, extends itſelf to the other Coats of the Inteſtines, and too often ends in a Mortification of them, if not timely relieved; as is but too evident from the Symptoms which attend them at the laſt, who die of this Diſeaſe, as well as from the Inſpection of their dead Bodies. From whence it is evident, that unleſs a Revulſion be made, and the Inflammation taken off, all the boaſted Specificks, or famed Reſtringents, how much ſoever extolled, are in vain, and too often do but haſten the Death of the Patient. But Bleeding accordingly, as the Strength of the Patient, the Quickneſs, Fulneſs, and Hardneſs of his Pulſe, and the Height of the Fever, and the other Symptoms indicate, and that repeated as the Strength of the Patient and the above Symptoms require, at proper Intervals; and after giving a Doſe of *Ipocacuanha* to cleanſe the Stomach, and probably to

to revulſe the Humours from the Bowels, and a Doſe of torrified Rhubarb with an Anodyne; giving *Antiphlogiſticks* with gentle Subaſtringents, and moderate Anodynes at proper Diſtances, and diluting moderately with ſubaſtringent cooling Liquids, given warm to encourage a free Perſpiration, I have always found to be the moſt ſucceſsful Method. And in ſome Caſes, where the Stools continue to be bad, and a free Diaphoreſis is not obtained, a Doſe or two of *Stibium Ceratum* after ſufficient Bleeding, &c. may be given, but I have often found that giving a few ſmall Doſes of *Ipocacuanha*, and an *Anodyne* after them, is much preferable, and has often ſucceeded when that much celebrated Medicine would not. *See the Treatiſe on* Dyſentery.

The Month of November continued to be very wet, and much Rain fell, and it was alſo much cooler than uſual in other Years. The Quantity of Rain which fell in this Month was equal to 12.96 cubic Inches deep. The loweſt the Thermometer ever was in any Morning this Month, was at 74; and the higheſt it ever was in the Morning, was at 80. The loweſt it ever was at Noon was 78, and the higheſt at Noon was at 83. The loweſt the Barometer ever was this Month, was at 29.7, the higheſt at 29.9.

We ſtill continue to have ſome Dyſenteries, though much fewer then we had in the

the two preceding Months: And a few were ſeized with a continued ſlow Fever of the *Synochus* kind; it firſt came on with a moderate Rigour, which was ſucceeded by a great Heat, a very quick Pulſe, Pain all over the Body, but moſt ſevere in the Head, and in ſome few was attended with a Catarrh and a Cough, then came on large profuſe Sweats, which did not relieve, but brought on a Languor and ſunk them much; their Blood was florid and a little lax, but not diſſolved. Bleeding theſe moderately once, or thoſe who had more elaſtic ſtrong Fibres and a more full hard Pulſe, twice, and giving Antiphlogiſticks in cooling Pectorals, kept the Fever moderate, and generally brought it to a Criſis on the 21ſt Day, when it was uſually carried off by a large warm, critical Sweat, and in ſome few by three or four looſe Stools, or in ſome by both. But this Fever ſoon diſappeared; and in general this Month was more healthful than the preceding Months.

December was much more dry than the preceding Months were, though we had a few ſmall Showers of Rain, more than uſual in this Month in other Years, but in general the Days were dry. The Quantity of Rain which fell in this Month, was but equal to 2.25 cubic Inches deep. The loweſt the Thermometer ever was in the Morning in this

this Month, was at 74; and the higheſt it ever was in the Morning was at 78. The loweſt it ever was at Noon was 80, and the higheſt was at 82. The loweſt the Barometer was at 29.7, and the higheſt at 29.9.

Upon the coming of this dry Weather, the Dyſenteries which were frequent and epidemical all over the Iſland in the three laſt Months, now totally ceaſed and diſappeared; and the inflammatory Diſeaſes alſo, were very few: But towards the latter End of the Month, we had ſome few inflammatory Quinſies; and many were ſeized with Catarrhs and Coryzas, ſo that few eſcaped them; they all had a Cough, Hoarſeneſs, and a great Defluction of Rheum on the Noſe, Bronchia and Lungs, coughed much, and expectorated a great Quantity of tough viſcid Phlegm, and ſome had a Fever with it; and young Children were in great danger of being ſuffocated with it.

Bleeding thoſe who were Plethoric and Feveriſh, and pectoral attenuating Medicines, which promoted a free Expectoration, and diluting with pectoral Liquids warm, ſoon relieved them: but to thoſe Children who were in danger of being ſuffocated, it was neceſſary to give a little *Oxymel Scilliticum* once or twice a Day, and a little *Syr. Scillitic.* often in a pectoral Tea, which brought up the tough Phlegm, and gave them immediate

diate Relief; I ſaw none that died of it, tho' I was told that ſome died of it; and we had but few other Diſeaſes this Month.

This Year from January the 1ſt, 1752, to January 1753, was a more than common wet Year; and the whole Quantity of Rain which fell in this Year was equal to 67.35 cubical Inches deep, which is a very great Quantity of Rain.

The Month of January was very dry, but moderately cool; the Quantity of Rain which fell in it, was only equal to 0.37 parts of a cubic Inch deep. A. D. 1753.

The loweſt that the Thermometer ever was in the Morning, was at 73, and the higheſt it ever was in the Morning this Month, was at 77. The loweſt it was at at Noon was 78, and the higheſt was at 80. The loweſt the Barometer was at was 29.7½, and the higheſt at 29.8.

The catarrhal Fever mentioned in the laſt Month, continued and increaſed, both in its being more frequent and more inflammatory in this, and ſpread all over the Iſland; ſo that few either white or black People eſcaped having it, either in a greater or leſs Degree, and as the Time advanced, it became more inflammatory. In ſome the Inflammation fell upon the Glands of the Throat, and produced an *Angina Inflammatoria*, attended with a ſtrong Fever, a quick, full, ſtrong, hard Pulſe, great Pain in the Head and Throat,

Throat, great Thirſt, and great Heat and Inflammation in thoſe Parts: Their Blood generally was highly inflamed, and when it ſtood till cold, was covered with a ſizy Starch or Buff-like Pellicle, and the Serum of a yellowiſh Colour, all which indicated plentiful Bleeding. And accordingly I found that bleeding plentifully at the Beginning of the Diſeaſe, ſome cooling Catharticks, and a liberal Uſe of Antiphlogiſticks internally, and Fomentations of the ſame Nature externally, with emollient repelling Cataplaſms, with Vinegar and *Crude Sal. Ammoniac*, and ſometimes letting them receive the Fumes of Vinegar through a Funnel into their Mouths and Throats, and Gargariſms of the ſame Nature, the Fever and all its Symptoms were generally carried off, and they recovered in a few Days. But when Bleeding freely, and the liberal Uſe of the Antiphlogiſticks were neglected at the Beginning, they generally ſuppurated (but not without Danger of ſuffocating the Patient) in ſix or ſeven Days time; and when they broke, moſt commonly left a hard Tumour in the external Integuments of the Throat, which continued a conſiderable Time (though they generally could breathe and ſwallow pretty well then) and were difficult to be diſcuſſed and removed afterwards. In ſome the Inflammation fell firſt upon the Throat, where it continued a Day or two, and then was tranſlated from

thence

thence and fell upon the Lungs and produced a violent Peripneumony, and in ſome it fell upon the Lungs at the firſt; in both it was attended with a quick, hard, and ſometimes a pretty ſtrong Pulſe, great Difficulty of Breathing, a Cough, with which they expectorated a tough viſcid Phlegm with much Difficulty, their Thirſt great, and the Fever high. In ſome others this Inflammation fell upon the Pleura, and produced a Pleuriſy with all the Symptoms of that Diſeaſe.

It was remarkable that the Inflammations ran much higher in all theſe Diſeaſes, and their Blood was generally more inflamed and ſizy in this Year, than ever I obſerved it to be in this warm Climate before, where the animal Solids are generally more relaxed; and the Sick in general required more large and oftener repeated Bleedings, before the Fever and Inflammation could be taken off, and the Diſeaſe conquered, than ever I obſerved in this warm Climate before *.

I muſt alſo here obſerve, that I found the *Crude Sal. Ammoniac.* to be a much more powerful *Attenuant*, and a greater *Refrigerant*

* *Query* 5. Did not this ariſe from the continued moiſt, wet Seaſon, in the latter Part of the laſt Year, which had much relaxed the Solids, and diminiſhed the Perſpiration in this warm Climate; and the ſudden Change from that, to the great Drineſs and Coolneſs of the two laſt Months, which had braced up the Solids again and rendered them more rigid and elaſtic than they were before, without ſufficiently reſtoring a free Perſpiration?

or *Antiphlogiſtic* when mixed with *Nitre*, than any that we have; and I found that it was more effectual in diſſolving this inflammatory ſizy Lentor of the Blood, than any other Medicine that we have in the whole *Materia Medica*; and though I had given it as a cooling Attenuant for many Years, yet I never had ſuch remarkable Opportunities of obſerving its extraordinary Effects in theſe inflammatory Caſes, as I had this Year. It cools greatly, and I think is more attenuating than the *Spir. C. C. vel Spir. Salis Ammon. Vol.* or their *Volatile Salts*, which ſtimulate and heat much at the ſame Time. I uſually give it when it is indicated to be given, from gr. v. to gr. xv. mixed with *Sal. Nitre*, from ℈i to ℈ji *vel* ʒi *in Decoct. Pectoral* with *Spir. Nitri Dul. et Spir. Mindereri*, and *Syr. e Meconio* to leſſen the Stimulus and Irritation of the Heat and Fever.

This Method I found to be the moſt ſucceſsful in the Pleuriſy, when aſſiſted with antiphlogiſtic Fomentations to relax the pained Parts; and with the Addition of *Syr. Scillitic. vel Oximel Scillit.* to aſſiſt Expectoration in the Peripneumonic Fever. And the ſame antiphlogiſtic Method was no leſs ſucceſsful, with the Addition of cooling Cathartick and Clyſters, with the beforementioned Medicines and Cataplaſms in the Quincey.

Some few had an inflammatory Fever, attended with a full, quick, hard Pulſe, and

Pain all over them, without fixing in any one Part or Place. Theſe were generally relieved by large, plentiful Bleeding, and the abovementioned antiphlogiſtick Medicines. As to the Quantity of Blood to be taken away, either in theſe, or in any other Caſes, it cannot be ſaid how much is neceſſary, becauſe a Perſon formed with delicate, weak, or relaxed weak Fibres, cannot often bear the Loſs of nine or ten Ounces of Blood, ſo well as a plethoric Perſon with ſtrong elaſtic Solids, can bear the Loſs of ſixty or eighty Ounces of Blood.

The Month of February alſo continued to be very dry, though we had ſometimes ſome ſmall Showers of Rain, though of little Importance; for the whole Quantity of Rain which fell in this Month, was but equal to 1.03 Inch deep.

The loweſt the Thermometer ever was in the Morning in this Month, was at 74, and the higheſt it ever was in the Morning this Month, was at 76; the loweſt it was at Noon was 78, and the higheſt at Noon was at 80. The loweſt that the Barometer was, was at 29.8, and the higheſt at 29.9.

Few Catarrhs appeared after the Middle of the laſt Month, and now they totally ceaſed: But the Numbers in the above inflammatory Diſeaſes increaſed during this Month, and required very large Evacuations by Bleeding, &c. before the Inflammation

and Fever could be taken off; which reduced ſome Patients pretty low. To theſe as well as to thoſe who were naturally weak, I found it neceſſary to give ſome Cardiacs; but I ſoon found that the uſual Cordial Waters, and Cardiac Medicines of the Shops, heated and inflamed the Blood too much, and increaſed the Fever in this warm Climate; wherefore I uſed the rich ſweet Wines made from mature Grapes, as Canary and Frontigniac, and found them to be much better Cordials in this Caſe, than the hot fiery Spirits of the Shops are, and that they heated and inflamed much leſs; to which I ſometimes added *Sp. C. C.* or *Spir. Mindereri*, thus, ℞ *Decoct. Pectoral.* ℔i. *Vini Canar. (vel Frontig.)* ℥v. *Elix. Paragoric.* ℥ſs. *Spir. Mindereri* ℥ij. *Syr. Scillitic.* ℥iſs *Miſce. Capiat æger Sal. Nitri* ℥ſs. *cum Sal. Ammon. Crud. Pur. gr.* x. *commixt. in Cochl. tria vel quatuor hujus Decoct. tertia quaq; hora.*

This revived them and encouraged the Expectoration, abated the Fever and Inflammation, and anſwered the deſired Succeſs.

And to ſome I ordered Veſicatories to be applied, which were of Service now at the latter end of the Diſeaſe, tho' they would have been hurtful and prejudicial towards the Beginning of it, by increaſing the Fever.

About the Middle of February, a *ſlow continued nervous Fever* ſeized ſome few Patients; it uſually came on with a ſlight Chilline ſs,

Chillineſs, or a gentle Rigor, and uncertain fluſhing Heats, a Loſs of Appetite, Nauſeas, and ſometimes a Reaching to vomit, a Laſſitude and Liſtleſsneſs, with Dejection and Anxiety, a Giddineſs with Pain in the Head and Back; an Exacerbation of all theſe Symptoms, with a low quick Pulſe generally towards the Evening: This uſually continued for five or ſix Days without the Patient's being quite caſt down, or his being willing to be confined to his Bed, or Chamber, in this warm Climate, in hopes of getting the better of it; but the Rigor returning, and the Fever and its Symptoms increaſing, at laſt obliged them to it. The Pain in the Head and Giddineſs increaſed, with a Torpor or Senſe of Weight and Coldneſs in the Occiput, and along the Coronary Suture accompanied with a great Laſſitude and Watching, or if they did ſleep, they were neither refreſhed by it, nor ſenſible that they did ſleep; their Urine was pale and always without a Sediment, as uſual in moſt Fevers in this Climate; the Pulſe was uſually low but quick, and often unequal or irregular; the Giddineſs and Pain in the Head increaſed much, and they were often delirious for a few Hours and then ſenſible again, and it returned again in the ſame Manner; and ſometimes a Tinnitus Aurium came on, after which a Deafneſs and a Delirium followed; the Tongue was ſometimes dry, tho'

often moiſt, but white and a little brown in the Middle, but rarely any Complaint of Thirſt; a great Faintneſs, and ſometimes a Deliquium Animi came on, eſpecially if they ſat up too long, though in the Bed; cold, partial Sweats came on, eſpecially on the Face, Neck, and the Back of the Hands, and ſometimes about the Præcordia: Some had a few looſe Stools, but they were ſo far from having Relief from them, that the Dejection and Weakneſs was increaſed by them: The Deliriums were not great but often returned, and ſometimes were rather a Confuſion of Action and Incoherency of Words, with a doſing and muttering to themſelves; and they ſometimes depoſited their Urine and Excrements without being ſenſible of it. When the Delirium increaſed, the Extremities generally grew cold, and their Nails livid, and the Pulſe became very quick, ſmall, weak, and irregular; and then they ſwallowed their Food with a difficult Gulping, and theſe were ſoon followed with great Tremors, Twitchings and Catchings, a Subſultus Tendinum, and the Delirium either ſoon turned to a profound Coma, or Convulſions came on, which ſoon ſnapped the Thread of Life. But on the contrary, if the Sweats were brought to be equal all over the Body, and warm, and copious, or if a plentiful Spitting came on, and the Pulſe became fuller, ſofter, and freer, and vibrated with more Liberty,

and

and all the Symptoms changed for the better, the Fever generally ended by a large critical, copious, warm Sweat on the nineteenth Day.

A Vomit given at the Beginning of this Fever, when the Sickneſs, Nauſea or Vomiting indicated it, was of ſingular Service; after which, ſaline attenuating Medicines, with the Volatiles and gentle Cardiacks were the moſt efficacious and ſucceſsful, with Variations *pro re nata*; Veſicatories were alſo of great Service to ſome: But Bleeding was in general very prejudicial, unleſs where the Patient was of a plethoric, robuſt Conſtitution, and then only in the Beginning of the Diſeaſe, where ſome inflammatory Symptoms indicated it, which ſometimes, though very rarely, happened, and then Blood was to be taken in a very moderate Quantity, but not without great Caution and Judgment.

I found that the following Method was both the moſt rational and the moſt ſucceſsful alſo, viz. giving the *Spir. Mindereri* plentifully, and *Spir. C. C. vol.* and ſometimes a little *Tinct. Cantharid.* in warm Wine-whey, made a little ſtronger than uſual in other Fevers; and ſometimes the volatile Salts, and Camphor, Saffron, &c. or a Draught of this Nature, which I uſed the moſt frequently; ℞. *Sal. C. C. vol.* ℈ſs. *Succi Limon.* ʒiij. *Aq. Menthæ Simp.* ʒiſs. *Spir. Mindereri* ʒij. *Vini*

Crocei ʒj. *Syr. Crocei.* ʒij. *Miſce, fiat Hauſt. tertia vel quarta, quintave quaq; Hora ſumendus.*

To this Draught I ſometimes in particular Caſes added *Tinct. Cantharid. gut.* xx. and I found theſe of the greateſt Service, eſpecially if the Patient diluted plentifully with warm Wine-whey, made a little ſtronger than uſual.

Some few had the putrid bilious, or yellow Fever in this Month, though the Seaſon was ſo cool; and that the now reigning epidemical, inflammatory Fevers were attended with ſuch a great inflammatory Lentor, or Viſcidity of their Blood; but it is probable that this Fever might ariſe from the Exerciſe and Intemperance of thoſe who had it now, as they were not many.

The Month of March was in general moderately dry, though we had at times ſome conſiderable Showers of Rain, ſo that it was not ſo dry as the preceding Months were. The Quantity of Rain which fell in this Month was equal to 2.21 cubical Inches deep. The loweſt the Thermometer ever was in the Morning in this Month, was at 72, and the higheſt it ever was in the Morning was at 78; and the loweſt it was at Noon was 78, and the higheſt at Noon was at 82. The loweſt the Barometer was in this Month, was at 29.8, the higheſt at 29.9.

We had a few of the inflammatory Fevers, and but a few, for they were now greatly abated; and the ſlow nervous Fever ſeemed

to

to ceaſe for this, and the four or five Months following; neither had we many chronical Diſeaſes, ſo that this Month was more than uſually healthful.

April was very dry and warm, and we had very little Rain, the whole Quantity which fell in this Month, was only equal to c.24 Tenths of a cubical Inch deep.

The loweſt the Thermometer was in any Morning was at 76, and the higheſt it ever was in the Morning was at 78; and the loweſt it ever was at Noon was 80, and the higheſt at 83. The loweſt the Barometer was at, was 29.8, the higheſt was 29.9.

This Month, though very dry and warm, was not very ſickly; we had only ſome few inflammatory Diſeaſes, as a few Pleuriſies and Peripneumonies, and ſome inflammatory Fevers; and alſo ſome Rheumatiſms of the inflammatory Kind, though the laſt are not near ſo frequent here as they are in England; neither are they uſually in other Years attended with ſo great a degree of Inflammation as they were in this Year, or as they uſually are in England: But this Year they appeared with the ſame Symptoms as they uſually do in England, and their Blood was moſt commonly as much inflamed, and covered with a buff-like Pellicle as it is there, and required the ſame Method of Treatment, viz. Bleeding, cooling Catharticks, and an Anodyne after them (as Dr. *Sydenham* adviſes) and Anti-

Antiphlogiſticks in the intermediate Days; and I found the Crude Sal. Ammoniac and Nitre were of great Service; and by this Method they generally ſoon recovered.

The Month of May was alſo very dry and warm, though we had ſome Rain towards the latter End of it. The whole Quantity which fell in this Month was only =1.31 cubic Inch deep. The loweſt the Thermometer ever was in the Morning, was at 77, and the higheſt it was at in the Morning, was at 81; the loweſt it was at Noon, was at 80, and the higheſt at 86. The loweſt the Barometer was 29.8½, the higheſt was at 29.9½.

The Diſeaſes we had this Month were of the inflammatory Kind, as in the laſt; a few Pleuriſies and Peripneumonies, and ſome had Tumors about the Fauces, Neck, or in other glandulous Parts, which ſuppurated ſlowly and with difficulty, and ſome of them left hard Tumors in thoſe Parts for a conſiderable time after, as obſerved before: And the Humours ſeemed now again to have a greater Tendency towards the Head and Breaſt, as they had then; and we had ſome few Apoplexies and Palſies.

June was very warm and moſtly dry, tho' we had conſiderable great Showers of Rain in ſome Days, but the intermediate Days were very warm and dry. The Quantity of Rain which fell in this Month, was equal to

2.44

2.44 cubical Inches deep. The loweſt the Thermometer was any Morning was at 77, and the higheſt it ever was in the Morning was at 80; the loweſt at Noon was at 82, and the higheſt at 86. The loweſt the Barometer was at 29.8½, the higheſt was at 29.9.

Though this Month was very warm, yet it was in general pretty healthful, for we had few ſick, except a few who had ſome of the above mentioned inflammatory Fevers; and theſe were much leſs violent, and more eaſily relieved by moderate Bleeding and the above mentioned antiphlogiſtic Method, than in the preceding Months.

But towards the latter End of the Month, ſome had a *Diarrhœa Febrilis*, and a few had a Dyſentery, but neither of them were very bad, nor were they difficult to cure. Some had the dry Belly-ach, which now was attended with ſome degree of Inflammation, and with ſome inflammatory Symptoms, which are not uſual in that Diſeaſe, nor did I ever meet with it before or ſince: This rendered its Cure a little more difficult, and leſs expeditious than the Cure of that Diſeaſe now uſually is; for ſome in this required Bleeding and the Uſe of Antiphlogiſticks, to be given with thoſe Medicines which are known to relieve, and take off that painful Diſeaſe at other times; and their Blood was more

more or leſs ſizy in this, though I rarely or never found it ſo in the true *Pictonic Cholic* before now.

Several, both Strangers and Natives, were ſeized with the *putrid bilious Fever*, in which I found the Method of treating it (hereafter mentioned) very ſucceſsful. See p. 1. Part II.

Some were ſeized with a Rigor which did not continue long, but was ſucceeded by a briſk hot Fever which uſually continued three or four Days, when a Tumor began to riſe uſually either in the Parotid, Subaxillary, or Inguinal Glands, or in ſome other Parts of the Body; upon the Appearance of which the Fever began to abate, and gradually went off as the Suppuration of the Gland advanced, without any malignant or other bad Symptoms, and they ſoon recovered.

In July we had a good deal of Rain, often with Thunder and Lightning, though the intermediate Days were hot and dry. The Quantity of Rain which fell was equal to 6.67 cubic Inches deep. The loweſt the Thermometer was in the Morning was 78, the higheſt 80; the loweſt it was at Noon was at 80, the higheſt was at 86. The loweſt the Barometer was at 29.9, the higheſt was at $29.9\frac{1}{2}$.

After the falling of this Rain, the Number of the Sick was conſiderably increaſed; Pleuriſies, Peripneumonies, and inflammatory Fevers

vers were more frequent, eſpecially the laſt. Dyſenteries alſo now became frequent, as uſual after the falling of the Rain. And the ſlow continued fever now returned again, with much the ſame Symptoms as it had in February, and was cured by the ſame Method and Medicines as then, only Bliſtering more freely or frequently, as the Sick were generally more ſunk and their Pulſe uſually lower, was neceſſary, and was of very great Service: But as the Fever then uſually went off by a manifeſt Criſis, by Sweating or Stools on the nineteenth Day, it now gradually declined after the twentieth Day, and went off without any manifeſt Criſis.

Several were ſeized with Apoplexies and Palſies this Month, more than I have ever ſeen here in any one Year before.

The Pertuſſis or hooping Cough alſo now ſeized many Children in this Town and Iſland. This is a Diſeaſe, which from all the Obſervations that I have been able to make, ſeems to be equally as infectious to Children, as either the Small-pox or Meaſles are; tho' I think it has not been mentioned as ſuch, by any one yet that I have ſeen: For whenever it comes into a Family or Town, I have obſerved that it generally infects and ſeizes all the Children in the Town who have not had it before, as the Small-pox and Meaſles uſually do: Neither have I ever obſerved, or heard from others, that they have known any

any Perſon to have it twice; therefore does it not ariſe from ſome infectious Miaſmata as they do? and is ſo far analogous to them; as alſo in this that it chiefly affects Children, rarely Adults as they do; though I have known ſeveral ancient People both here and in England to have it, but they all ſaid that they never had it before. And as this Diſeaſe has not been known to be in this Iſland for many Years paſt, neither could I find by the ſtricteſt Enquiry that I could make, that any Child or elder Perſon did bring it hither; now, muſt we not conclude that it is a Diſeaſe which proceeds from ſome peculiar Diſpoſition in the Air to generate its Infection or Miaſma, or that they can be carried in the Air from ſome other Place to this great Diſtance, which being taken with the Saliva or otherwiſe into the circulating Fluids, as other infectious Diſeaſes are; it there generates a peculiar Viſcidity in the ſerous, lymphatic, or yet finer Fluids, and particularly in thoſe of the Bronchia and Lungs, which at the ſame time do greatly irritate thoſe ſenſible nervous Parts, ſo as to produce that convulſive Cough, and convulſive Spaſms which uſually attend it, which again are increaſed by the Viſcidity of the finer Fluids.

This being the Cauſe, and theſe the Effects of it, the Intentions of Cure muſt be to leſſen the Quantity and attenuate the Viſcidity

dity of the Fluids, and abate the Stimulus. Wherefore bleeding ſuch Children as are of a ſanguine plethoric Conſtitution, and keeping the Body moderately open, are neceſſary, and to attenuate the viſcid Fluids as much as we can; for which Purpoſe I have found ſomething of the following Nature, with Variations *pro re nata*, the moſt effectual.

℞. *Milleped. viv. bene lot.* ℥ſs. *contund. in Mort. vitreo. et ſuperaffund. Infuſionis Rad. Glycyrrhiz,* ℥viii. *probe conterent. deinde cola, Colaturæ adde Aq. Sem. Fæniculi* ℥ij. *Aq. Nuc. Moſcat. Spir. Nitri Dul. ana* ℥ſs. *Tinct. Cantharid.* ℥ij. *Syr. e Mecon.* ℥ſs. *vel* ℥i. *Miſce, exhibe Cochl. unum ſubinde urgente Tuſſe. Auget. doſ. pro ratione ætatis ægri.*

And if the Symptoms increaſe and the Patient's Pulſe will permit, more Blood may be taken away; but if the Pulſe be ſmall and low, a Veſicatory may be applied and kept open, or the Quantity of the Tinct. Cantharid. increaſed, if the Symptoms of a Stranguary do not forbid it: And if Convulſion-Fits come on, I uſually give *Muſk* with a little *Syr. e Mecon.* or *Elix. Paragoric*; but the firſt ſeldom fails to render the Diſeaſe more moderate, and in time takes it off.

The Month of Auguſt was more dry and warm than the laſt Month, though we had ſome wet Days towards the latter End of it. The Quantity of Rain which fell in this Month

Month was equal to 3.47 cubic Inches deep. The loweſt the Thermometer was in the Morning was 79, and the higheſt was 82; the loweſt it was at Noon was at 83, and the higheſt was at 86. The loweſt the Barometer was, at 29.9, the higheſt at 29.9.

The inflammatory Diſeaſes which reigned in the preceding Months continued, and rather increaſed in this; eſpecially Pleuriſies, Peripneumonies, Pleuro-peripneumonies, and the inflammatory Fevers, and Dyſenteries became more frequent; and their Blood in all theſe was generally full as ſizy, or rather more ſo, than in the laſt Year. The hooping Cough alſo continued to affect Children, and we had a few Apoplexies and Palſies: And ſome had the ſlow continued Fever, as in the laſt Months; in which I found the *Acetum Camphoratum*, *Spiritus Mindereri*, *vel Hauſtus è Volatilibus Fullerii*, or the learned Dr. *Huxham*'s Draught of *Sal. C. C. et Succus Limon.* as before, and *Veſicatories*, were the moſt efficacious Medicines, and were of the greateſt Service.

A Cholera Morbus alſo ſeized ſeveral, eſpecially Children; in which I found that giving *Rad. Ipocacuanh. gr.* i. *vel gr.* ij. *vel Vini Ipocacuanh. gut.* xx. *vel* xxx. in a little Green Tea, or Chicken Water, to encourage the Vomiting; and *Tinct. Thebaic. a gut.* v. *ad* x. and more to Adults, after it; and a ſmall Doſe of *Rad. Rhei* with an Anodyne a few Hours

Hours after that; and then a ſaline Julep with an Anodyne generally took it quite off: But if the Vomiting ſtill continued, a *Fotus ex Fol. Menthæ, Theriac. Androm. cum paul. Vini Rubri* applied to the Region of the Stomach, with the uſe of the ſaline Julep, conſtantly took it off, and they ſoon recovered.

We had much Rain in September, though we had ſome intermediate Days which were dry and very warm, as this is uſually the hotteſt Month in the Year. The Quantity of Rain which fell in this Month was equal to 8.77 cubic Inches deep. The loweſt the Thermometer was in the Morning was at 77, and the higheſt was at 82; the loweſt it was at Noon was at 80, and the higheſt was at 86. The loweſt the Barometer, was at 29.8, and the higheſt was at 29.9.

The epidemical Diſeaſes of this Month were the ſame as in the laſt Months; and notwithſtanding that we had ſo much Rain in this Month, yet the Dyſentery was not altogether ſo frequent as it was in the laſt Month: But the Peripneumonies, and Pleuro-peripneumonies, were uſually attended with more Pain in the Head, the Fever higher, and the Pulſe uſually more tenſe and hard, and their Blood was much inflamed and covered with a thick Starch or Buff-like Pellicle.

The ſlow continued Fever was alſo more frequent, but their Blood never was inflamed, nor ever had the leaſt Appearance of a Sizineſs in it.

October alſo continued to be wet, more than uſual in that Month, though we had ſeveral interpoſed Days that were dry and very warm. The Quantity of Rain which fell in this Month was equal to 8.17 cubic Inches deep. The loweſt the Thermometer was at in the Mornings was 76, and the higheſt was at 80; the loweſt it was at Noon was at 80, and the higheſt at Noon was at 86. The loweſt the Barometer ever was, was at 29.6, and the higheſt this Month was at 29.8. I never ſaw the Barometer thus low as it was on the 1ſt of this Month, at 29.6, and that Day we had a Storm, or very high Wind, and great Showers of Rain.

The inflammatory Diſeaſes, which reigned in the preceding Months, were much leſs frequent in this; but the Dyſentery was both more frequent and more violent in its Symptoms, and more difficult to be cured. The Hooping-cough was alſo more frequent among Children; and a few were ſeized with the ſlow continued Fever, as in the laſt Month.

Likewiſe ſome had the putrid, bilious, or yellow Fever, but it was either more mild and its Symptoms leſs violent than it uſually is, or it was rendered ſo by the Method of

treating

treating it; which ſee, Part II. For tho' its Symptoms at the firſt were as uſual, yet they ſoon became more moderate by being thus treated; and all I did ſee, recovered.

November was very dry, and warmer than uſual in other Years. The Quantity of Rain which fell this Month was only equal to 1.33 cubic Inches deep. The loweſt the Thermometer was in the Mornings, was 75, the higheſt was at 78; the loweſt it was at Noon was at 80, and the higheſt at Noon was 86. The loweſt the Barometer was, is 29.8, and the higheſt 29.8. It did not alter in this Month but was always the ſame.

The Dyſentery which was very frequent in the two laſt Months, upon the Seaſon being more warm and dry, became much leſs ſo, and towards the latter end of the Month it totally ceaſed: But the inflammatory Diſeaſes, eſpecially Pleuriſies, Peripneumonies, Opthalmies, and ſome Quinſeys, ſtill continued, and now were attended with more Pain in the Head than uſual; for the Humours now again had a greater Diſpoſition or Tendency towards the Head, than uſual at other Times. The Hooping-cough alſo ſtill continued among the Children; and ſome few had the putrid, bilious, or yellow Fever.

December alſo continued to be very dry, and conſiderably warmer than uſual in this Month; though we had a few ſmall Showers in ſome Days. The Quantity of Rain which

fell this Month, was equal to 2.11 cubic Inches deep. The loweſt that the Thermometer was in the Mornings was at 73, the higheſt at 78; the loweſt it was at Noon was at 80, and the higheſt at Noon was at 82. The loweſt the Barometer was at was 29.8, and the higheſt was at 29.8½.

The Hooping-cough, and the above mentioned inflammatory Diſeaſes, almoſt totally ceaſed and diſappeared in this Month alſo.

Some few were ſeized with Pain in their Heads, and Swellings about the Fauces, and the Humours ſtill continued to have a more than uſual Tendency towards the Head and the ſuperior Parts of the Breaſt, in this as well as in the laſt Months; but in general both this and the laſt Month were more than uſually healthful: For the only Diſeaſe which could properly be called Epidemical, was an Inflammation of the Mediaſtinum, which moſt commonly chiefly ſeized the ſuperior Part of it above the Pericardium, and only ſeized the Negroes, and few or any white People: It firſt came on with a cold Rigor and Tremor, which continued one, and ſometimes two Hours, and was then ſucceeded by a hot Fever, with great Heat and acute Pain in the upper Part of the Breaſt, with darting Pains from the ſuperior Part of the Sternum, through the upper Part of the Mediaſtinum to the Spine; great Pain in the Head, with a quick, hard, full Pulſe, a laborious, difficult,

quick

quick Breathing: Some had a Cough and a great Anxiety at their Breaſt, others had not; thoſe who had, generally had a very quick, ſmall, hard Pulſe, which uſually after Bleeding became more full, a dry Tongue and great Thirſt, and as the Diſeaſe advanced they generally grew delirious. The Heat about the Præcordia and upper Part of the Cheſt, as alſo in the Head, was very great; they expectorated little; their Urine was high coloured without a Sediment; their Blood was florid and red on the firſt Day, but ſizy on the ſecond and after. Bleeding plentifully at the firſt Beginning of the Diſeaſe, and repeating it if the Symptoms indicated it, and a liberal Uſe of the antiphlogiſtick Medicines, with a cooling diluting Regimen, and the uſe of cooling emollient antiphlogiſtick Fomentations to the Breaſt, moſt commonly relieved them, and carried it off in four or five Days time. But if Bleeding copiouſly at the firſt, and the above antiphlogiſtic Method was not timely uſed, they uſually became delirious on the third Day, and their Pulſe became exceeding quick, ſmall and irregular, and their extreme Parts cold, and they died.

In ſome it did not fall upon the Breaſt, but upon the Head and Brain, and firſt one Eye ſwelled as if from a Stroke or Contuſion, and then the other Eye in the ſame manner, the Fever great, and they ſoon after became delirious, which increaſed and was a certain

Sign that the Brain or its Meninges were inflamed as well as the Eyes; ſoon after this the Pulſe became quick, ſmall and irregular, and their extreme Parts cold; and all who were ſeized thus died.

The whole Quantity of Rain which fell in this Year 1753, was equal to 38.12 cubical Inches deep.

1754. The Month of January was cool and pleaſant, but very dry till the 21ſt Day, on which and the three following Days we had much Rain, and then it was dry to the End of the Month. The Quantity of Rain which fell in this Month was equal to 5.63 cubic Inches deep. The loweſt the Thermometer was any Morning was 72, and the higheſt was 76; the loweſt it was at Noon was at 76, ond the higheſt at 80. The loweſt the Barometer was at 29.7½, and the higheſt at 29.9.

The ſlow, continued, nervous Fever ſtill continued in ſome Parts of the Iſland; and ſome Negroes had the inflammatory Fever deſcribed in the laſt Month: And we had a few Quinſeys of the inflammatory Kind, but upon the falling of the Rain in the latter End of the Month, both theſe laſt ſoon after ceaſed and diſappeared. But the Hooping-cough ſtill continued in the remote Parts of the Iſland, and alſo the Small-pox, but they generally were of a benign, diſtinct Kind.

February was very dry and moderately cool, and we had no Rain except on the 10th Day; the

the whole Quantity which fell this Month was only equal to 0.89 Parts of a cubical Inch deep. The loweſt the Thermometer was any Morning, was at 72, the higheſt was at 76; the loweſt it was at Noon was at 78, and higheſt was at 82. The loweſt the Barometer, was at 29.7½, and the higheſt was at 29.9.

The ſlow nervous Fever ſtill continued in ſome Parts of the Iſland, and the Hooping-cough alſo in ſome remote Parts of it; but the Small-pox now totally ceaſed. We had ſome few inflammatory Fevers, and but few, and they totally diſappeared about the Middle of this Month, and it was pretty healthful.

March was alſo dry till near the latter End of the Month, when we had a conſiderable Quantity of Rain; it was alſo moderately cool. The Quantity of Rain which fell was only equal to 3.53 cubic Inches deep. The loweſt the Thermometer was in the Morning, was at 73, the higheſt was 77; the loweſt it was at Noon was 78, and the higheſt at Noon was 82. The loweſt the Barometer was at 29.8, and the higheſt at 22.9.

I cannot ſay that we had any Diſeaſes that were epidemical in this Month, but the ſlow nervous Fever, which now was much more frequent than it was in any of the preceding Months: Its Symptoms were much the ſame as before deſcribed, except that the looſe Stools, or ſlight Diarrhœa, which uſually

came on towards the Beginning of the Diſeaſe, were now leſs frequent; and the Delirium, Tremors, Startings, Catchings, and the Subſultus Tendinum, were both greater and more frequent than they were before*. And the Fever now put on and appeared in this warm Climate, with all the ſame Symptoms as it uſually does in England; and as they are accurately deſcribed by that learned and able Phyſician Dr. *Huxham* in the cooler Climate of Plymouth, which therefore I need not here repeat. I ſhall obſerve, that this Fever now came conſtantly and regularly to a Criſis on the nineteenth Day, unleſs it was injuriouſly wrong treated; neither would a ſmall matter divert it from coming to its Criſis on that Day: For I ſaw a worthy and ingenious Gentleman, who on the ſixteenth Day of the Fever loſt above two Quarts of Blood in half an Hour's time, by the burſting of one of the internal Hæmorrhoid Veins, which ſunk him as low and as near Death as poſſible; but the Hæmorrhage being inſtantly ſtopped by Styp-
ticks,

* *Query* 6. Were not ſome of the infectious Miaſmata, or of the morbid Matter, diſcharged and carried off by thoſe looſe Stools, which rendered the above Symptoms more moderate and milder after? And when Nature did not ſo carry the morbid Matter off, were not thoſe Symptoms more violent? And did not Nature thus ſhew us the Way we ought to follow and aſſiſt her? At leaſt I thought ſo; and found that ſuch as I ſaw in time to give a Doſe of Ipocacuanha and a little Rhubarb after, I generally found that the Symptoms were more moderate after.

ticks, and ſome cardiac and volatile Medicines given immediately after, and ſuitable cordial Nouriſhment; his Pulſe, which was ſcarce perceptible for ſome conſiderable time after it, did ſo riſe on that and the next Day, that on the eighteenth Day it was more full than ever before, tho' he was of a ſlender, thin, dry Conſtitution; and on the nineteenth Day his Fever came to a regular and compleat Criſis, and he perfectly recovered. I alſo ſaw another Patient who loſt as much Blood, or more, in the ſame manner; but his Hæmorrhage cauſed the coming on of the Criſis to be deferred to the twenty-ſixth Day, and yet he recovered; but the Criſis in all the others conſtantly came regularly on, on the nineteenth Day.

I found that giving an Emetic at the Beginning of the Diſeaſe, and a Doſe of Rhubarb after it, or in ſome Caſes only the latter; and then giving *Spir. Mindereri* ʒſs in any fit ſimple Water with a little *Vini Crocei*, or *Acetum Camphoratum* to ſome Patients, or ſaline Draughts with Volatiles, or Dr. *Huxham*'s ſaline Draught to others, every three, four, or ſix Hours, as the Fever was higher or lower, or ſunk too low, and diluting plentifully with warm Wine-whey, ſometimes made pretty ſtrong of the Wine, eſpecially when they were weak and low, were of the greateſt Service; as alſo were Veſicatories: So likewiſe were *Muſk*, *Camphor*, and *Tinct.*

of Cantharides, when the convulsive Spasms were great; as these attenuated the Viscidity of the Lymph and finer Fluids, without too much inflaming the Blood; whereas the *Rad. Serpentar. Virg. Confect. Cardiac.* and such hot Medicines, heated and inflamed more, without attenuating the Fluids so much, as I observed; which confirms the Opinion of the learned Dr. *Huxham*, that the Cause and Seat of this Disease is chiefly in the Lymph and finer Fluids, in which it produces a Viscidity and Inaptitude to Motion.

This slow nervous Fever was certainly infectious, for I observed that many of those who visited, and most of them that attended the Sick in this Fever, were infected by it and got the Disease, and especially those who constantly attended them, and performed the necessary Offices for the Sick.

The Month of April was also dry in general, though we had some Showers of Rain sometimes; but from the Middle of it to its latter End, it was more warm than usual in other Years. The Quantity of Rain which fell in this Month was equal to 4.22 cubic Inches deep. The lowest the Thermometer was in the Mornings, was 76, the highest 80; the lowest it was at Noon was at 80, and the highest at Noon was 85. The lowest the Barometer, was at 29.8, and continued the same all the Month.

The

The ſlow nervous Fever ſtill continued in ſome remote Parts of the Iſland, though they were but few that had it. We alſo had a few Pleuro-peripneumonies, but the Inflammation that attended it was not very great, neither was it commonly very dangerous.

Some were ſeized with a violent Pain and Inflammation at the Scrobiculum Cordis, which extended to the Stomach, attended with Sickneſs and Vomiting; a quick Pulſe, though in ſome it was ſmall and oppreſſed, though commonly hard, and accompanied with cold clammy Sweats, and ſome had a few looſe Stools with it at the Beginning; it differed from a Cholera Morbus in moſt of its Symptoms, though it had ſome of them, and was really an Inflammation on thoſe Parts, which Nature attempted to relieve by the Vomiting and Stools, but could not: The Pulſe being low, though quick, and the Extremities cold, it deterred many from bleeding them; yet they could not be relieved, nor the Pain removed without it: But upon Bleeding, the Pain abated, and the Pulſe became more full, and ſofter, and the Coldneſs on the Extremities went off, ſo that it might be repeated where it was neceſſary; and by the uſe of Fomentations to the pained Parts, and giving Antiphlogiſticks liberally, and ſome Volatiles, they were generally pretty ſoon reſtored to Health. This Diſeaſe came in with the

the hot Weather, and did not continue long*. The Hooping-cough ſtill continued in ſome remote Parts of the Iſland.

The Beginning of May was very warm and dry, but from the 8th Day to the End of the Month we had a great deal of Rain, more than the moſt ancient People could remember to have ſeen at this time of the Year. The Quantity which did fall was equal to 14.65 cubic Inches deep. The loweſt the Thermometer was in the Mornings, was at 77, the higheſt at 80; the loweſt it ever was at Noon, was at 78, the higheſt at Noon was at 86. The loweſt the Barometer, was at 29.7½, the higheſt was at 29.9.

So much Rain falling rendered the Air more cool and temperate, and the Seaſon more healthful; and we had no Diſeaſes which could be properly called Epidemical, except a few Pleuriſies of the Nothous Kind, and an uncommon kind of Jaundice which ſeized

* *Query* 7. As the nervous Fever was then Epidemical, were not ſome of its infectious Miaſmata received by the Sick at the ſame time as they were ſeized with the Inflammation, and produced that ſmall low Pulſe, and cold clammy Sweats, which are Symptoms which do not uſually attend an Inflammation, at leaſt the Beginning of it? As this certainly was an Inflammation both from its Symptoms, and from ſome that I ſaw who had been treated with hot Medicines, and died of it with all the Marks of a Mortification on thoſe Parts.

ſeized ſeveral Children*. The firſt was moſt commonly carried off by bleeding once or twice, a cooling Purge or two, and Antiphlogiſticks with Volatiles after.

The Jaundice which ſeized Children, chiefly from three to ſeven or eight Years of Age, uſually came on with an Indiſpoſition to play, and an Indolence to Motion, a Loſs of Appetite, white coſtive Stools, a ſmall dull Pain at the Region of the Liver; ſome were a little feveriſh, but none had any Symptoms of an Inflammation of the Liver, or of the biliary Ducts; others had no feveriſh Heat, but they all had a conſiderable degree of Yellowneſs in their Skin and their Eyes.

This uncommon Jaundice was generally carried off by gentle opening Catharticks, and a few ſaponaceous Medicines, with a few gentle, eaſy Stomachics to reſtore the Appetite after.

After theſe Rains the nervous Fever ceaſed in the Town and near it.

The Month of June was uncommonly wet, and more Rain fell than any Perſon living here could remember to have ever ſeen at this Time, or any other Time of the Year; for we had ſeveral great Floods which did conſiderable

* *Query* 8. As this Jaundice ſeized ſeveral Children in the ſame Town, and ſometimes in the ſame Houſe, at, or near the ſame Time, and ſome time after ceaſed or diſappeared; may we not conclude that it was Epidemical?

ſiderable Damage to ſeveral Houſes. The Quantity of Rain which fell this Month was equal to 19.78 cubic Inches deep. The loweſt the Thermometer was in the Morning, was at 76, the higheſt at 80; the loweſt it ever was at Noon, was at 78, and the higheſt at Noon was 85. The loweſt the Barometer, was at 29.8, and the higheſt was at 29.9.

We had much Thunder and Lightning with theſe great Rains.

So much Rain falling rendered the Air cooler and moiſter than uſual, and it was alſo pretty healthful; for we had no Diſeaſes which could be ſaid to be Epidemical, except a few Pleuriſies, ſome of them of the Nothous Kind, and ſome Pleuro-peripneumonies, and ſome few who had an Inflammation of the Stomach, and of the Inteſtines; but theſe were ſeldom inflamed in any great Degree, nor the Fever violent in any of them, therefore they were generally pretty ſoon relieved by Bleeding, and the Uſe of Antiphlogiſticks internally and externally, and recovered pretty ſoon. The Hooping-cough ſtill continued among Children in the North-weſt Part of the Iſland, and ſome Adults had it there alſo, who had not had it before.

In July we had frequent Showers of Rain, though not near ſo much as we had in the laſt Month, nor ſo much Thunder and Lightning, though we had ſome about the Middle of the

Month. The Quantity of Rain which fell in this Month, was equal to 7.52 cubical Inches deep. The loweſt the Thermometer was in the Morning, was 76, the higheſt was at 80; the loweſt it was at Noon was at 81, and the higheſt at Noon was 86. The loweſt the Barometer, was at 29.8, the higheſt was at 29.9.

This Month was alſo much cooler than uſual in other Years, and alſo more healthful; though we had a few Pleuriſies and Peripneumonies, and ſome Diarrhœas and Dyſenteries: But theſe were but few, and were very rarely attended either with ſo great a degree of Inflammation or Malignity, as they uſually are in a more warm wet Seaſon, coming upon a long hot dry Seaſon. Several were ſeized with a hard dry Cough, they expectorated little, and that was clear, tough, viſcid, and unconcocted, and was brought up with violent Coughing and Difficulty *. Neither emollient Pectorals, oily Mixtures, nor yet Opiates were of much Service: But Volatiles, as *Sal. C. C. vol. Flor. Benzoin*, &c. mixed with a little *Theriac. Adrom.* given two or three times

* *Query* 9. Did not this uncommon Cough ariſe from that unuſual degree of Moiſtneſs and Coolneſs of the Air, at this time of the Year, introducing ſuch a degree of Viſcidity into the circulating Fluids, and falling upon the Bronchia and Lungs? Or was that Viſcidity produced by the ſame Cauſe which produced it in the Hooping-cough, which was then Epidemical?

times a Day, ſoon relieved them, and repeating it two or three Days, took it quite off.

Some few had the ſlow nervous Fever in the remote Parts of the Iſland, and the Hooping-cough ſtill continued among the Children in thoſe Parts.

We had frequent Showers of Rain in Auguſt, and ſometimes Thunder and Lightning with great Showers, intermixed with calm hot Days, ſo that it might be called a moiſt hot Seaſon. The Quantity of Rain which fell in this Month, was only equal to 4.69 cubic Inches deep. The loweſt the Thermometer was in the Morning, was 77, the higheſt was at 80; the loweſt it was at Noon was at 81, and the higheſt at Noon was at 85. The loweſt the Barometer, was at 29.8, and the higheſt was at 29.9.

This moiſt warm Seaſon continuing, Diarrhœas and Dyſenteries were more frequent, eſpecially among the Negroes; though ſome white People had it alſo, but it was more malignant than in moſt other Years.

We had alſo ſome few Pleuriſies and Peripneumonies; and ſeveral were ſeized with an Inflammation of the Pelvis and Peritoneum about the lower Region of the Belly, which often extended to the Neck of the Bladder, attended with acute Pain in thoſe Parts, and a Difficulty of making Water, and ſometimes with great Pain in going to Stool: Their Pulſe

Pulſe was quick and hard, though generally ſmall, and ſometimes attended with a Coldneſs and cold Sweats on the extreme Parts*, which often deterred the Apothecaries from bleeding them: Though it was a true Inflammation on thoſe Parts, and upon bleeding them the Pain abated, and the Pulſe became more full, and the Heat was equally diffuſed all over the Body. By Bleeding, Fomentations to the pained Parts, cooling emollient Clyſters, and a free Uſe of Antiphlogiſticks, they generally ſoon recovered. Here the Acuteneſs of the Pain was the principal Indication for Bleeding, and its cauſing the Pulſe to riſe, the cold Sweats to go off, and its Succeſs, confirmed its being an Inflammation of thoſe Parts, and this Practice to be right.

Some few Patients were ſeized with a συνεχεῖς, or a continued remitting Fever, which here uſually came to a Criſis on the fourteenth Day, but in ſome it did not come to its Criſis till the ſeventeenth or nineteenth Day, and then went off: But it never came to intermit regularly here in any, as it frequently uſes to do in England.

* *Query* 10. Did not this continued moiſt warm State of the Air, ſo relax the Solids as to bring on this ſmall Pulſe and cold Sweats, &c. in this Inflammation, as alſo in that of the Scrobiculum Cordis, or Stomach and Diaphragm beforementioned, with the ſame Symptoms? As they are Symptoms which uſually do not attend an Inflammation at its Beginning, as in theſe, which were both Inflammations.

The ſlow nervous Fever ſtill continued in the North-eaſt Parts of the Iſland, with the ſame Symptoms, and came to its Criſis on the nineteenth Day, when in and near the Town in the Winter or cooler Months; but it has not appeared in, or near the Town, ſince the Month of May.

We had frequent Showers of Rain, and ſometimes Thunder and Lightning, and much Rain in the Month of September; tho' the intervening Days were generally very warm, and either calm, or we had ſmall variable Winds, moſtly from ſome of the Southern Points, which are uſually hot. The Quantity of Rain which fell this Month, was equal to 6.10 cubic Inches deep. The loweſt the Thermometer was in the Morning, was 77, the higheſt was 80; the loweſt it was at Noon was at 81, and the higheſt at Noon was 85. The loweſt the Barometer, was at 29.7, and the higheſt at 29.9.

The Weather continuing to be moiſt and warm, Dyſenteries were more frequent, eſpecially among the white People; and were now attended with a greater degree of Inflammation than they were in the laſt Months. But bleeding once or twice, an Emetic, and toaſted Rhubarb with an Opiate after, and Antiphlogiſticks with gentle Reſtringents and Opiates, to abate the Pain and reſtrain the Violence of the Flux, till the Inflammation was taken off, were generally ſucceſsful.

The

The Inflammation of the Pelvis and Peritoneum, alſo continued to ſeize ſeveral in this Month, as well as in the laſt; and I obſerved that the Humours had an unuſual Tendency and Afflux towards the lower Parts of the Belly, in theſe two Months, as they had towards the Head and Breaſt, or the upper Parts of the Body, in the preceding hot and dry Months*.

Arthriticks alſo ſuffered much in this Month, by the Gout appearing with anomolous Symptoms, and often attacking the Bowels, or falling upon the Pelvis and the Neck of the Bladder: But they were generally relieved by bathing their Feet in a Decoction of Piemento Leaves, or other warm ſtimulating Aromaticks, and applying ſtimulating Fœnigmi to the Soles of the Feet, or Veſicatories to the remote Parts which it uſed to attack when regular; and giving ſome Aromaticks with light Chalybeats and Volatiles, by which Methods it was generally brought to be regular, and was carried off as uſual.

* *Query* 11. Does not the continued Drineſs of the Seaſon brace up the Solids, and diſpoſe them to Inflammations; and the continued Heat of the Sun affect the Head and upper Parts of the Body, ſo as to cauſe a greater Afflux of the Humours to thoſe Parts, in long continued dry, hot Seaſons? And do not the continued moiſt, warm Seaſons, relax the Solids, eſpecially thoſe of the Abdomen, which are naturally more moiſt, and ſo cauſe a greater Afflux of the Humours to them in ſuch Seaſons, to which a Diminution of Perſpiration in ſuch Seaſons, may contribute?

We had a few Pleuriſies, Quinſeys, and Ophthalmies, and but few; and theſe were generally of a mild, benign Kind, and pretty eaſily cured.

The ſlow nervous Fever which had continued eighteen Months in this Iſland, in one Part or other of it, now totally diſappeared, and left the Iſland, and I think has not been ſeen in it ſince; tho' ſome have been pleaſed to call ſome other Fevers by that Name.

October was this Year much hotter than uſual in other Years, and alſo very dry, except that on the 18th, 19th, and 31ſt Days, we had much Thunder and Lightning, and a conſiderable deal of Rain: So that the Quantity of Rain which fell in this Month, though moſtly dry, was equal to 4.07 cubic Inches deep. The loweſt the Thermometer was in the Morning, was at 76, the higheſt was at 82; the loweſt it was at Noon was at 82, and the higheſt at 86, and moſtly at 85 or 86. The loweſt the Barometer, was at 29. 7, and the higheſt was at 29.9.

This Month being very dry and warm, Dyſenteries became much leſs frequent, and more mild and moderate; and the inflammatory Fevers fewer and much leſs violent alſo*; and it was in general more healthful.

A Fe-

* *Query* 12. Did not this proceed from the long Continuance of the moiſt warm Seaſon in the preceding Months, by which the Animal Solids were relaxed, and rendered

A Febris Ephemera ſeized ſome few, with a cold Rigor, which uſually continued about an Hour, and was then ſucceeded by a briſk hot Fever, a quick full Pulſe, ſeldom hard, the Heat great, which uſually continued about fourteen or ſixteen Hours, when a general copious, warm, critical Sweat came on, and carried the Fever quite off in the Space of twenty-four Hours time, as a true ſimple Ephemera does.

In the Month of November we had frequent Showers of Rain, and it was much cooler in general than the Months laſt paſt. The Quantity of Rain which fell in this Month was equal to 4.66 cubic Inches deep. The loweſt the Thermometer was in the Morning, was at 76, and the higheſt was at 80; the loweſt it was at Noon, was at 79, and the higheſt at Noon was at 84. The loweſt the Barometer, was 29.7, and the higheſt was at 29.8.

This Month alſo continued to be pretty healthful; but towards the latter End of it we had a few Diarrhœas, and ſome Dyſenteries, moſtly among the Negroes, and a few inflammatory Fevers; and we had no Diſeaſes but theſe, which could be ſaid to be Epidemical.

rendered leſs fit, or leſs liable to produce inflammatory Diſeaſes? And, did not the coming of the warm dry Weather after that, produce a free Perſpiration, without inflaming the Body, turn the Humours from the Bowels that way, and abate the Dyſenteries, &c.

The Month of December is uſually in other Years, a dry Month, but this was very wet, for we had Rain almoſt every Day more or leſs, and ſome Days much Rain, which rendered it alſo more cool than uſual. The Quantity of Rain which fell this Month was equal to 11.27 cubic Inches deep. The loweſt the Thermometer was in the Morning, was at 75, the higheſt was at 78; the loweſt it was at Noon, was at 77, the higheſt at Noon was at 82. The loweſt the Barometer, was at 29.6½, the higheſt was at 29.8.

The whole Quantity of Rain which did fall in all this Year 1754, was equal to 87.01 cubical Inches deep; which is equal to 7 Feet 3.01 Inches deep, which is a very great Quantity, as it was an uncommon wet Year.

Upon ſo much Rain falling, Dyſenteries were more frequent, and were attended with ſome Symptoms which were of a malignant Nature, tho' not more inflammatory; wherein moderate Bleeding once, *Ipocacuanha*, *Rhubarb and Opiates*, with gentle Reſtringents and Sudorificks not too much heating, were the moſt ſucceſsful: And when the Diſeaſe proved more obſtinate, the *Ipocacuanha* in ſmall Doſes, ſeveral times repeated (as mentioned in the following Treatiſe) generally procured a free Diaphoreſis, and carried the Diſorder off. To ſome a Doſe or two of the *Stibium Ceratum*, when the Fever and Inflammation were taken off, was of great Ser-

vice;

viee; as this Medicine ſeldom ſucceeds till that is abated or taken off: An Obſervation which has not been taken ſufficient Notice of in giving the Stibium.

The Febricula alſo ſeized ſome few, and when properly treated was not dangerous; and thoſe who were not bled, or but very ſparingly, recovered much ſooner: But where the Launcet was too haſtily and too freely uſed, it was of bad Conſequence; as I ſaw in ſome Caſes where they had been too haſty with the Launcet before I came: Though I ſaw none that died, yet ſome were in great Danger from it, and I heard of ſome who died by it.

Many were afflicted with Boils, and ſome with larger Impoſthumations; and we had no other Diſeaſes but theſe, which could be called Epidemical.

The Month of January was generally dry, 1755.
though we had a few ſmall Showers at times, and it was alſo more cool than uſual; and the moſt pleaſant Weather that I ever ſaw in the Weſt Indies. The Quantity of Rain which fell in this Month, was only equal to 1.20 cubical Inch deep. The loweſt the Thermometer ever was in the Morning, was at 72, the higheſt at 77; the loweſt it ever was at Noon, was at 77, the higheſt at Noon was at 81. The loweſt the Barometer, was at 29.8, the higheſt was at 29.9.

And as this Month was cool and pleaſant, it was alſo the moſt healthful; ſo that I cannot ſay that we had any Diſeaſes that were epidemical.

February was rather more cool, and full as pleaſant as the laſt Month; and I found *Fahrrenheit*'s Thermometer in the Mornings, as low as 70 Degrees, which I never ſaw it before, or ſince, in eleven Years time.

The Quantity of Rain that fell in this Month, was only 1.41 cubic Inch deep. The loweſt the Thermometer was in the Morning, was at 70, the higheſt at 75; the loweſt it ever was at Noon, was at 77, and the higheſt at Noon was 81. The loweſt the Barometer, was at 29.8, and the higheſt was at 29.9.

February was as dry, pleaſant, and cool, as the laſt Month, and no leſs healthful, for we had no epidemical Diſeaſe till near the latter End of it, when a catarrhal Fever ſeized ſeveral; firſt with a cold Rigor, which in ſome continued four or five Hours, in others no longer than one or two, then was ſucceeded by a hot Fever, with great Pain in the Head: Some had Pain in their Back and all over them, but moſt of them had Pain only in the Head, which continued in ſome but one Day, in others two or three Days, and in ſome longer, and then in ſome went off by a critical warm Sweat; but in moſt an In-

Inflammation came on in one Leg (ſomething like the Fever which produces the Elephantiaſis, but without any Swelling in the inguinal Gland, or the Red Stroke from it to the Leg, neither was it that Fever) and it became much inflamed, and looked very red, like the Skin of one in the ſcarlet Fever; and in ſome, little ſmall Bliſters roſe on the Leg like an Eryſipelas, upon which the Fever abated and went gradually off by this imperfect Criſis, and the Cuticula peeled off after as in an Eryſipelas, or the ſcarlet Fever, and they ſoon recovered: In others, when the morbid Matter was not thus caſt upon the Leg, or ſome other Part, the Fever continued a little longer, and was carried off by once moderate bleeding, and encouraging a free Diaphoreſis with cooling Sudorificks, as *Sal. Nitre, Camphor. Spir. Mindereri, Acetum Camphorat.* and diluting plentifully with warm Wine-whey, moſt commonly in four or five Days time. Their Blood was generally very florid, and a little inflamed, but rarely ſizy.

Aſthmatical and phthyſical People ſuffered much from this Catarrh; others had it and a Cough like a common Cold, and few eſcaped having either more or leſs of it; ſo that it might be ſaid to be truly Epidemical, and moſt probably did ariſe from this unuſual Coolneſs and Drineſs of the Air, rarely felt in this warm Climate.

The

The Month of March was rather more dry than the two preceding Months; and more cool than uſual in ſuch dry Weather. The Quantity of Rain which fell in it, was only equal to 0.66 Parts of a cubic Inch deep. The loweſt the Thermometer was in the Morning was at 72, the higheſt was at 77; the loweſt it was at Noon, was at 78, and the higheſt at Noon was at 82. The loweſt the Barometer, was at 29.8, and the higheſt was at 29.9.

Catarrhs, Coughs, Pleuriſies, and Peripneumonies, now became more frequent, eſpecially the laſt: Their Blood was now generally more or leſs ſizy and inflamed, and both it and the Pleuriſies required pretty large repeated Bleedings, with antiphlogiſtick Pectorals, and expectorating Medicines; for in general they expectorated little without the Aſſiſtance of the laſt.

Several Children had that exanthematous Eruption, called the Chicken-pox; and ſome few on the Eaſt Side of the Iſland, ſtill had the Hooping-cough: And we had no other Diſeaſes that were epidemical.

April was dry, except a few Showers which fell on three or four Days, but it was warmer than the three preceding Months; though ſome Days were ſuddenly cool, then warm again. The Quantity of Rain which fell in this Month, was equal to 2.17 cubical Inches deep.

deep. The loweſt the Thermometer was in the Morning, was 75, the higheſt was 79; the loweſt it was at Noon was at 79, and the higheſt at Noon was 84. The loweſt the Barometer, was at 29.8½, and the higheſt at 29.9½.

Theſe ſudden Changes in the Air, produced Catarrhs, Coughs, and ſome Peripneumonies, and Quinſeys, but not of a bad Kind, nor the Inflammation attending them very great; and if taken in time were not difficult to be cured, by Bleeding and the above-mentioned antiphlogiſtick Method. The Chicken-pox continued among Children: Some had the Pictonic Cholic, or dry Belly-ache, which was generally removed in four or five Days time, by the Method hereafter mentioned *.

And ſome ſeafaring People had the putrid, bilious, or yellow Fever.

In the Month of May we had frequent Showers of Rain, which with the Clouds intercepting the hot Rays of the Sun, always cool the Air conſiderably; ſo that this Month was more cool than uſual in other Years. The Quantity of Rain which fell this Month, was equal to 6.62 cubic Inches deep. The loweſt the Thermometer was in the Mornings, was 76, and the higheſt was 80; the loweſt it was at Noon, was at 80, and the higheſt was at 85. The loweſt the Barometer, was at 29.8, and the higheſt at 29.9.

As

* See the following Treatiſe.

As this Month was ſo cool and pleaſant, it was alſo more healthful; ſo that except a few Catarrhs and Quinſeys, we had no Diſeaſes that ſeemed to be influenced by the State of the Air, or that could properly be called Epidemical; and it was in general very healthful.

We had frequent great Showers of Rain in the firſt Part of June, ſo that it was wet, and more cool than this Month uſually is; but the latter part of the Month was more dry. The Quantity of Rain which fell in this Month, was equal to 5.84 cubical Inches deep. The loweſt the Thermometer was in the Morning, was 76, the higheſt was 80; the loweſt it was at Noon, was 80, and the higheſt was at 86. The loweſt the Barometer, was at 29.8, and the higheſt was at 29.9.

As this Month was alſo cool, it was likewiſe in general healthful. We had only a few Catarrhs, Coughs, and Pleuriſies; and ſome Dyſenteries among the Negroes: But this as well as the four preceding Months, were more than uſually cool and healthful.

We alſo had frequent Showers of Rain during the Month of July, but it was more warm than the laſt Month. The Quantity of Rain which fell in this Month, was equal to 5.70 cubic Inches deep. The loweſt the Thermometer was in the Morning, was 78, the higheſt was 80; the loweſt it was at Noon,

Noon, was at 82, and the higheſt at Noon was at 86. The loweſt the Barometer, was at 29.8, and the higheſt was at 29.9½.

The Diſeaſes we had this Month, principally affected the Abdomen; for now the Humours had an uncommon Tendency towards the Viſcera of the lower Belly, as in the laſt Year at this Time: And ſome were ſeized with an Inflammation of the Bowels; others with a Cholera Morbus; and ſeveral with Diarrhœas with much griping Pain; in ſome with a Fever; others had little or no Fever with it: In both they uſually had a Sickneſs at their Stomachs, and their Stools were mixed with a good deal of viſcid pituitous Mucus. This Diarrhœa ſeized Children more frequently than Adults; tho' ſeveral of the latter had it. Thoſe who had not a Vomit given at the Beginning of the Diſeaſe, generally had it in a more ſevere degree, and were more difficult to cure; eſpecially when they were reduced low by it: And ſome died of it. Some had Dyſenteries with very bloody Stools, &c. and ſeveral had the putrid bilious Fever, eſpecially Stangers.

Arthriticks alſo ſuffered much from this Diſpoſition of the Humours towards the Viſcera, which uſually carried the gouty Humour to them, from whence it was ſometimes difficult to remove it to its proper Place, the extreme Parts.

The

The Month of Auguſt was warmer than the laſt Month, tho' we had more Rain in this, than in the laſt. The Quantity of Rain which fell in this Month was equal to 6.28 cubical Inches deep. The loweſt the Thermometer was in the Morning, was at 78, and the higheſt at 81; the loweſt it was at Noon, was at 83, the higheſt at 86. The loweſt the Barometer, was at 29.8, the higheſt at 29.9.

This frequent Rain, as uſual here, produced many Dyſenteries, eſpecially among the Negroes; though ſeveral white People were ſeized by it alſo, but it was neither ſo frequent, nor ſo malignant, as it was in the laſt and ſome other Years. We alſo had ſome Quinſeys, Ophthalmies, and inflammatory Fevers, but they were neither attended with ſo high a degree of Inflammation, nor ſo difficult to be cured, as in ſome other Years; for they were generally removed and taken off by Bleeding and Antiphlogiſticks, without much Danger.

The Eſſera, or Prickly-heat, and Boils, were frequent, eſpecially among Children, as uſual on the coming in of the hot Seaſon; though it was not ſo ſickly as it uſually is in moſt other Years at this Time.

September was very hot, though we often had Showers of Rain, moſt commonly in the Nights, which cooled the Air a little. The Quantity

Quantity of Rain which fell in this Month, was equal to 4.56 cubic Inches deep. The loweſt the Thermometer was in the Morning was at 78, the higheſt at 80; the loweſt it was at Noon, was at 80, and the higheſt at Noon was 85. The loweſt the Barometer, was at 29.8, and the higheſt was at 29.9.

Diarrhœas and Dyſenteries were frequent, as uſual at this Time of the Year; though they were not ſo violent or malignant, nor ſo difficult to cure as in ſome other Years. Inflammatory Fevers, Quinſeys, Ophthalmies, Pleuriſies, and Peripneumonies, though not ſo very frequent, yet were ſo frequent that they might juſtly be deemed Epidemical: Their Blood in general was a little ſizy, and when it ſtood till cold, was covered with a thin Starch-like Pellicle; yet not ſo thick, or ſo much inflamed, as it is in theſe Diſeaſes in ſome other Years.

Arthriticks ſuffered much in this Month alſo, from the gouty Humour being turned upon the Bowels, and the Diarrhœa cauſed thereby, was not eaſily ſtayed, or the Gout turned into its proper Courſe and Place. A ſmall Doſe of *Ipocacuan. viz. gr.* iij. *in Theriac. Androm.* ℈i. *vel.* ʒſs. given and repeated two or three times, at proper Diſtances; then warm Aromaticks with Volatiles, and a gentle Opiate, commonly anſwered, with the Aſſiſtance of the Pedeluvium and Fœnigmi to the

the Soles of the Feet, as beforementioned to carry the gouty Humour to the remote Parts of the Body; but in ſome Caſes they would not ſo effectually anſwer, without the Aſſiſtance of ſome Preparations of Steel, as the learned Dr. *Muſgrove* judiciouſly obſerves †.

The Middle of October was dry, but in the Beginning, and towards the latter End of it, we had a great deal of Rain. The Quantity which fell in this Month, was equal to 9.54 cubical Inches deep. The loweſt the Thermometer was in the Morning, was at 78, the higheſt was 80; the loweſt it was at Noon, was at 82, the higheſt at Noon was at 85. The loweſt the Barometer, was at 29.8, the higheſt was at 28.8½.

As the falling of ſo much Rain, rendered the Air cooler than it was in the laſt Month; a catarrhal Fever ſeized many, eſpecially Children, for of theſe few or none, either White or Black eſcaped it; and all had it either in a greater or leſs degree: Some had it ſo ſlightly, that they eat, drank, and played as if well, then coughed pretty much, and after it returned to their Play again as if well: Some had it in a greater degree; and others were ſeized with a Chillineſs or gentle Rigor, though not obſerved by ſome, which was ſucceeded by a hot Fever, accompanied with Pain in the Head and Back, a Sickneſs at their Stomachs, and Vomiting; but in ſome the

† De Arthritide Onomola.

the Vomiting did not come on till the third, fourth, or fifth Day, and then it uſually was more frequent and more violent, and was attended with ſome Symptoms of an Inflammation of the Stomach; the Fever and Heat continued great, the Pulſe full, quick, tenſe, and hard, they breathed quick, and ſome with Difficulty; their Blood was florid and much inflamed, and in ſome very ſizy: The Cough increaſed as the Diſeaſe advanced, and they brought up a tough viſcid Phlegm, ſome a concocted thicker Matter, which they uſually ſwallowed down into the Stomach, and after a little time vomited up, as Children who are not of Age and Senſe to ſpit it out, uſually do: Some had it ſo ſlightly as to require no Medicines; others had it ſo violently as to be in great Danger, and ſome died of it. Bleeding thoſe once or twice, and ſome thrice, with a liberal Uſe of Antiphlogiſticks and Pectorals, moſt commonly relieved them, and carried it off, if taken in time. This Fever did not go off by any regular Criſis; but the Inflammation being abated, and taken off by the above Methods, the remaining Part of the morbid Matter was diſcharged gradually from the Lungs and Bronchia, by coughing and expectorating, and they recovered; though it reduced ſome of them very low before they recovered: Some few Adults had it, but moſt commonly in a more moderate degree; yet ſome had it more violently.

We had ſome Peripneumonies, and a few Quinſeys; but except theſe and the above catarrhal Fever in Children, it was a tolerable healthful Seaſon.

November was much drier, and ſome Days were much warmer than any in the laſt Month*; though we had ſome Rain about the Middle and at the latter End of the Month. The Quantity of Rain which fell in it being only equal to 4.40 cubic Inches deep. The loweſt the Thermometer was in the Morning, was at

* On the 1ſt of November 1755, which was three Days before the new Moon, a very extraordinary Phænomenon happened at *Bridge-town* in *Barbadoes*. At 20 Minutes after 2 o'Clock after Noon, above an Hour after it was High-water there, the Sea ſuddenly flowed and roſe more than two Feet higher than it does in the higheſt Spring Tides, and in three Minutes time it ebbed ſo as to be as much lower than the uſual loweſt Ebb; and then it flowed again as high as it did before: And thus it continued to ebb and flow to this uncommon Height, and to fall to that unuſual Lowneſs, every five Minutes, ſo as to leave the Sides of the Channel dry to a conſiderable Diſtance; but the Times between its Ebbing and Flowing decreaſed, ſo as to be a little longer, and the Water to riſe a little leſs each Time, almoſt in an arithmetical Progreſſion, after the firſt four or five Times, till near ſeven o'Clock in the Evening, when I returned out of the Country, and had this Account of it from ſeveral Gentlemen who carefully obſerved it: And it then continued ebbing and flowing, though it did not then riſe above one Foot higher, and fall one Foot lower, than its uſual Ebbing and Flowing in the common Tides, and it was then about twenty Minutes between each time of Flowing; and ſo it continued gradually to abate in each Oſcillation, till after nine o'Clock in the Evening, when the Return of

at 74, the higheſt at 81; the loweſt it was at Noon, was 80, the higheſt at Noon was 85. The loweſt the Barometer, was 29.7, the higheſt was at 29 8.

The catarrhal Fever continued moſt of this Month alſo, and ſpread itſelf all over this ſmall Iſland, ſo that few or no Children eſcaped it; tho' ſome had it ſo mildly as not to be confined in the Houſe by it, when others were in the greateſt Danger in it, or died of it: And in this Month ſeveral who had

of the uſual Tide put an end to this extraordinary Motion of the Sea. This Day was remarkably ſerene, warm, and dry; we had little Wind, and that from the Eaſt; the Face of the Sea was calm and ſmooth before it came, and the Ships in the Bay were not moved by it; but the ſmall Craft in the Channel over the Bar, were driven too and fro with great Violence, and ſome of them up againſt the Bridge: And the Water flowed in and out of the Harbour with ſuch a Force, that it tore up the black Mud in the Bottom of the Channel, ſo that it ſent forth a great Stench; and cauſed the Fiſhes to float on its Surface, and drove many of them on to the dry Land, at a conſiderable Diſtance, where they were taken up by the Negroes. Many People were Witneſſes of this uncommon Phænomenon, which could not be accounted for, from the known Cauſe of the Tides, nor from any other natural Cauſe, unleſs we ſuppoſed that an Earthquake was at ſome Diſtance in the Sea, as I then ſaid: Though no Motion of the Earth was perceived here by any Perſon on the Land, or in the Ships in the Bay; neither was any Noiſe heard, either from the Earth, or in the Air.

But two Months after this, we received an Account of a moſt dreadful Earthquake, which happened on the ſame Day at Liſbon in Portugal, and deſtroyed the greateſt Part of that populous rich City.

had it, had an inflammatory Quinſey accompanying it, the Inflammation falling upon the Throat at the ſame time.

I found the *Crude Sal. Ammoniac.* joined with *Nitre*, to be the moſt powerful Attenuant of that viſcid ſizy Lentor, in the Blood of thoſe who have theſe inflammatory Diſeaſes, and the greateſt Antiphlogiſtick at the ſame time.

This Fever did not go off by any regular Criſis, but went off gradually in this Month, as it did in the laſt. I alſo obſerved, that it did not in all Patients fall upon the Sneiderian Membrane, and the Bronchia and Lungs; but in ſome particular Conſtitutions, it fell upon ſuch other Parts of the Body, as were either naturally

We are told, that the firſt Shock of the Earthquake there, happened at three Quarters of an Hour after nine o'Clock, and the ſecond Shock which was much greater, and agitated the River and the Sea much more violently there, was at twenty Minutes after ten o'Clock before Noon: And the Sea at *Barbadoes* was agitated as above; firſt at twenty Minutes after two o'Clock in the Afternoon. The Diſtance between *Liſbon* and *Bridgetown* is near 3400 Engliſh Miles, and the Difference of Time is near three Hours and a Half, which makes ſeven Hours and a Half; and if the Sea was moved at *Barbadoes* by that Earthquake at *Liſbon*, as it is moſt probable that it was, then the vibrating Motion was communicated thro' ſo ſoft a Medium as the Body of the Water is, 3400 Miles in ſeven Hours and a Half's time, which is at the Rate of $45\frac{3}{4}$ Miles each Hour, or ſeven Miles and a Half in each Minute; which is a very ſwift Motion to be communicated by Percuſſion, through ſo ſoft a Medium as Water is.

naturally weaker, or had been rendered ſo by ſome preceding Diſeaſe; and then it produced ſome different Symptoms, ſuch as are peculiar to thoſe Parts upon which it fell, when they are diſordered, and conſequently required ſome different Methods of Treatment: But as this was an inflammatory Fever, and appeared as ſuch in all thoſe different Shapes, with inflammatory Symptoms, they all required Bleeding and antiphlogiſtick Medicines, with Variations *pro re nata.*

We had much Rain from the Beginning to the Middle of December, accompanied with briſk cool Winds; but from the Middle to the End of the Month, it was more dry and cooler, than in moſt other Years. The Quantity of Rain which fell this Month, was equal to 8.91 cubic Inches deep. The loweſt the Thermometer was in the Morning, was 72, the higheſt was 78; the loweſt it was at Noon, was at 79, the higheſt at Noon was 82. The loweſt the Barometer, was at 29.8, the higheſt was at 29.9.

And the whole Quantity of Rain which fell in all this Year 1755, was equal to 57.29 cubical Inches deep.

Dyſenteries continued to be epidemical in ſome Parts of the Iſland, though few in or near the Town had it. We alſo had ſome inflammatory Fevers, and a few were ſeized with an Inflammation of the Bowels, but not many, neither was the Inflammation great or

violent; though the Humours ſtill continued to have an unuſual Tendency and Afflux towards the Bowels. And Arthriticks, eſpecially ſuch as had weak Bowels, ſuffered much from the gouty Humours turning that way; But in general it was tolerably healthful.

1756. The Month of January was in general very dry, though we had a few ſmall Showers at the Beginning of it. The Quantity of Rain which fell in it, was only equal to 0.45 Parts of a cubic Inch deep. The loweſt the Thermometer was in the Morning, was at 71, the higheſt at 76; the loweſt it was at Noon, was at 76, the higheſt at Noon was at 80. The loweſt the Barometer, was at 29.8, the higheſt was at 29.9.

As the Weather was cool, pleaſant, and dry, it was alſo in general pretty healthful; except that towards the North-eaſt Part of the Iſland, they had ſome Dyſenteries, which were attended with inflammatory Symptoms, and a Fever mali Moris, which was often followed with Aphthæ towards the latter End of the Diſeaſe: But Bleeding at the Beginning of the Diſeaſe pretty freely, a Doſe of *Ipocacuan.* and *Rhubarb* and Opiates, &c. and the Method hereafter mentioned, generally rendered it more moderate, and in a little time took it off. Though to ſome it was neceſſary to give the *Ipocacuanha* in ſmall Doſes after them, which generally was ſucceſsful: Though ſeveral of them had taken the *Sti-*

bium

bium Ceratum, and repeated it ſeveral times before I ſaw them, without much or any Beneſit from it; but they were not bled, or at leaſt not ſufficiently, and that Remedy ſeldom does ſucceed when an Inflammation attends the Diſeaſe, unleſs it be firſt taken off by ſuitable Evacuations.

We alſo had ſome Diarrhœa's, which in general were more eaſily relieved.

February continued to be very dry, and we had no Rain except a ſmall Shower on the 12th, 13th, and 20th Nights. The Quantity that fell in this Month, was only equal to 1.27 cubic Inch deep. The loweſt the Thermometer was in the Morning, was 70, the higheſt 76; the loweſt it was at Noon, was at 77, the higheſt was at 82. The loweſt the Barometer, was at 29.8, and the higheſt was at 30.

Though this Month was ſo dry, yet the Wind being generally in the N. E. Points, it was more cool than I ever obſerved it before; for I found *Fahrrenheit*'s Thermometer ſeveral Mornings as low as 70, which is the loweſt that I ever ſaw it in *Barbadoes*; neither did I ever ſee the Barometer as high as 30 Inches before. And as it was thus cool, tho' dry, it was more than uſually healthful, for we had no Diſeaſes which were epidemical.

March was alſo dry. The Quantity of Rain which fell, being only equal to 1.52 cubic Inch deep. The loweſt the Thermome-

ter was in the Morning, was at 73, the higheſt at 78; the loweſt it was at Noon, was at 79, and the higheſt was at 83. The loweſt the Barometer, was at 29.8½, and the higheſt was at 29.9½.

This Month continued to be dry, and more than uſually cool in this Climate, at this time of the Year; and it was pretty healthful.

But I obſerved that Arthriticks ſuffered pretty much in this dry cool Seaſon; and ſeveral Perſons were ſeized with the *Opiſthotonos* and the *Tetany*, from ſeemingly very ſlight Cauſes*. And we had a few Catarrhs, and ſome few Quinſeys; and ſome had Tumors about the Parotids, Fauces, and Neck: But in general it was pretty healthful.

April was very dry, as well as the three preceding Months; but it was not only warmer than them, but it was warmer than uſual at this time, eſpecially towards the latter End of it. The Quantity of Rain which fell in this Month, being only equal to 0.37 Parts of a cubic Inch deep. The loweſt the Thermometer was in the Morning, was at 75, the higheſt at 79; the loweſt it was at Noon, was at 81, the higheſt at Noon was at 84. The loweſt the Barometer, was at 29.8½, the higheſt was at 29.9.

The

* *Query* 13. Did not this continued dry, cool Seaſon, brace up the Solids, and render them more rigid, and diminiſh the Perſpiration, and ſo affect the Arthriticks? And from this increaſed Rigidity of the Nerves, were not the *Opiſthotonos* and *Tetany* more frequent, and more eaſily produced?

The firſt Part of this Month was in general pretty healthful, but towards the latter End of it, ſome were ſeized with a Fever, which is called a συνεχεῖς by the Greeks, or a continued remitting Fever, which moſt commonly came on firſt with a Chillineſs, not a Rigor, which was ſoon ſucceeded by a hot Fever, with great Pain in the Head and Back, a Sickneſs at the Stomach, and frequent Reaching and Vomiting, ſo that ſome could retain little on their Stomachs, either Medicines or Nouriſhment; their Pulſe was uſually quick and full, in ſome a little hard and tenſe: Their Blood was florid, and of a ſoft looſe Texture, but not ſo much diſſolved as it uſually is in the putrid bilious Fever, though ſomething like it during the firſt two or three Days of the Fever, and very little Serum ſeparated from the Craſſamentum; but as the Fever increaſed, it became more denſe, and ſeparated more Serum, though it ſtill remained florid. They were very reſtleſs, almoſt continually toſſing and tumbling, they got little Sleep, and that diſturbed and without refreſhing them; their Skin was generally hot and dry, though ſometimes moiſt, and they in a fine breathing Sweat: Some had large cold clammy Sweats, eſpecially on the extreme Parts, though very hot about the Præcordia. The Fever abated and remitted at ſome certain time, once in every twenty-four Hours, but ſtill continued, and returned with great

great Heat, Vomiting, and all the ſame Symptoms at different times in the Day, in different Patients, but uſually at the ſame time in the ſame Patient, and generally abated again in ſix, eight, or ten Hours time; and thus returned once in every twenty-four Hours time, without being influenced or increaſed by the Heat of the Day, as moſt Fevers in this hot Climate are. Thus it continued to remit, and uſually come to its ἀκμήν or Height, and began to abate a little between the fourth and fifth Days, and generally came to its Criſis on the ninth Day, and went off when it was properly treated.

Bleeding once at the Beginning of the Diſeaſe, and an Emetic after it, were of great Service, and yet more ſo if a gentle antiphlogiſtick Purge, of Manna and Tamarinds with a little Nitre, was given the next Day after it; or to thoſe who had a Diarrhœa, as ſome few had, a ſmall Doſe of Rhubarb after the Vomit. In ſome plethoric Conſtitutions, Bleeding twice was neceſſary where the Symptoms indicated it; but I obſerved that ſome Practitioners were too haſty and too free of their Launcet at the Returns of the Fever, and that it was prejudicial to the Sick. After theſe, the Uſe of ſoft ſmooth Antiphlogiſticks, and a Doſe of *Syr. e Meconio* at Nights (becauſe I obſerved, that either *Tinct. vel Extract. Thebaic.* generally brought on a Delirium, or if preſent before, increaſed it) moſt commonly

monly greatly contributed to carry the Fever regularly on, and brought it to a Criſis, and carried it off by a copious warm critical Sweat on the ninth Day; ſome had a looſe Stool or two alſo, after which they ſoon recovered, and we had no other Diſeaſes that were epidemical.

May continued to be very dry, and alſo warmer than the laſt Month, till near the latter End of it, when we had ſome Rain: The Quantity which fell was but equal to 1.12 cubic Inch deep. The loweſt the Thermometer was in the Morning, was at 78, the higheſt was at 80; the loweſt it was at Noon, was at 83, and the higheſt at Noon was at 86. The loweſt the Barometer, was at 29.8, and the higheſt was at 29.9.

Upon the Increaſe of the Warmneſs of the Weather, the continued remitting Fever became more frequent, and varied a little in its Symptoms: The Vomiting was much leſs frequent, and the Head more affected, eſpecially with violent ſhooting darting Pain, moſtly over the Eyes, particularly during the Exacerbations and Returns of the Fever; and ſome had a comatous Stupor, others were delirious during that time: The Pulſe was full and quick, but generally ſoft, during the firſt two or three Days; but afterwards uſually became very variable, ſo that one ſeldom found the Pulſe the ſame, in the ſame Patient at different Times; ſometimes it was very

very quick, fluttering, irregular and ſmall, at other times ſoft and full, then varying between theſe almoſt every Hour; the Patient ſometimes hot and dry, at other times in a profuſe Sweat, warm at one time, at other times cold: The Tongue moſtly furred over and white, ſometimes brown; ſome were very thirſty, others moderately ſo: They generally complained of a great Languor and Faintneſs; their Urine was moſtly high coloured, in ſome paler, and with a Cloud ſuſpended in it, never with a Sediment, not even when the Criſis came on, nor even after it; and I have always obſerved, that a Sediment is very rarely ſeen in the Urine in this warm Climate, in any Fever; though it is frequently ſeen in England in moſt Fevers, upon the coming of the Criſis, and eſpecially in this Fever, and is generally like Brick-duſt*: So that little Judgment can be formed by inſpecting the Urine in this Climate, though we frequently can in England.

Notwithſtanding theſe Alterations, the Fever continued to come to its Height between the fourth and fifth Day, when properly treated, and Nature was aſſiſted, and not hindered

* *Query* 14. Does not this proceed from the great Heat of the Climate, where Nature is conſtantly accuſtomed to a frequent and great Diſcharge of the animal Salts by Sweat, where the Sweat is always found to be much more ſalt than it is in colder Climates; which animal Salts are uſually carried off by the Urine in all colder Countries?

dered by improper Practice, and then gradually declined and came to its Criſis regularly on the ninth Day, as before, moſt commonly by a copious warm critical Sweat; in a chance one, by a few looſe Stools: And I ſaw one Gentleman in whom it went off by a copious Diſcharge from the Glands of the Bronchia and Lungs, and probably ſome Part of the morbid Matter by the Salivary Glands, and was brought up by a frequent Coughing, and conſtant Expectorating and Spitting; as I have more than once ſeen in ſome other Fevers in England.

I obſerved that giving a Vomit in the Beginning of this Fever, when it was attended with ſo much Vomiting, in the laſt Month, was of very great Service; but now when they vomited leſs, or not at all, and the Head was more affected, I found that an Emetic was of no Service, but rather hurtful; but that a gentle antiphlogiſtick Purge given the firſt or ſecond Day of the Diſeaſe, was of very great Service, and generally rendered the Fever more mild and moderate, than it was when no ſuch Purgative was given.

Except this Fever, and not very many had it, we had no other Diſeaſes which could be ſaid to be epidemical; ſo that it was in general a pretty healthful Seaſon.

The dry warm Weather continued to the Middle of June, when a conſiderable Quantity of Rain fell, equal to 3.37 cubic Inches

deep. The loweſt the Thermometer was in the Morning, was at 79, the higheſt at 87; the loweſt it was at Noon, was at 82, and the higheſt at Noon was at 87. The loweſt the Barometer, was at 29.8½, the higheſt was at 29.9½.

Upon the falling of this Rain, the Weather became more cool and moiſt; and the continued remitting Fever totally diſappeared, ſo that I did neither ſee, nor hear of any, except one that was ſeized with it after this Change. Some few had Catarrhs, and ſome were ſeized with Inflammations in the Breaſt, tho' not many; and upon the falling of this Rain the Seaſon in general became healthful.

From the Middle of June, to the End of July, we had frequent great Showers of Rain, and it was much cooler than the two preceding Months were, and more cool than uſual in this Month in other Years. The Quantity of Rain which fell in this Month was equal to 6.75 cubical Inches deep. The loweſt the Thermometer was in the Morning, was at 77, the higheſt was 80; the loweſt it was at Noon, was at 82, the higheſt at Noon was at 86. The loweſt the Barometer, was at 29.8½, the higheſt was at 29.9½.

The Weather being in general much cooler, Catarrhs became more frequent, though not very bad; and we had ſome Pleuriſies and Peripneumonies, but not of a bad Kind; and they were commonly removed by Bleeding,

ing, and the uſual antiphlogiſtick Method and Medicines. But Dyſenteries, upon the falling of theſe Rains, became frequent, and ſome of them were of a bad malignant Kind: They uſually came on gradually at the Beginning, and the Fever was very moderate on the two or three firſt Days, and ſometimes ſcarce perceptible; but on the third, fourth, or fifth Days, the Fever increaſed much, and ſometimes to be violent, and the Purging alſo, with much griping Pain in the Bowels, and Sickneſs at the Stomach, and frequent Stools with much Blood and Brine-like Ichor, and much Mucus was diſcharged with them; the Pulſe was very quick, ſometimes full, but more frequently ſmall, and often hard, but always very quick; they were often delirious, and their extreme Parts cold. Bleeding at the Beginning, and repeating it as the Fever, &c. indicated; *Ipocacuanha*, *Rhubarb*, and Opiates, with antiphlogiſtic Reſtringents and Opiates, were the moſt ſucceſsful in general, with *Ipocacuan.* in ſmall Doſes. But in ſome Caſes, though theſe were given in the moſt cautious and judicious Manner, they did not give that Relief, nor anſwer as they uſually do in other Years to ſome Patients, neither did the Ipocacuanha in ſmall Doſes; yet the Antiphlogiſticks with ſubacid Reſtringents and Antiſepticks with ſmall Doſes of Opiates (and the Teſtacea to ſome Children, with Antiphlogiſticks and gentle Anodynes) anſwered better,

better, and often prevented a Mortification from coming on in ſome Patients; but in ſome few others, after four or five Days more, though the Stools had been brought by theſe Methods to be more ſtercoraceous, and they ſeemed to be ſomething better, the Stools returned with more Violence, and the Pulſe became more frequent, ſmall, quick, and irregular, the extreme Parts grew cold, with cold clammy Sweats, the Delirium increaſed, a Coma came on, and nothing could prevent the fatal Period; and they died with all the Symptoms of a Mortification of the Bowels. This was the Caſe of a few; but others in general when bled and vomited at the firſt, and then giving the Ipocacuanha in ſmall Doſes, and Opiates, with Antiphlogiſticks and ſubacid Reſtringents and gentle Opiates, generally recovered, tho' not without great Difficulty and Danger: But as this Diſeaſe continued, it became leſs malignant, and more moderate than it was at its firſt coming.

We had a conſiderable Quantity of Rain through all the Month of Auguſt, though but in Showers, and it was often clear and hot between them; and from the Middle of the Month to the End of it, it was very warm, as we had but little Wind, and it was often calm. The Quantity of Rain which fell in this Month, was equal to 3.89 cubic Inches deep. The loweſt the Thermometer was in the Morning, was at 78, the higheſt was 80; the

the loweſt it was at Noon, was at 82, and the higheſt at Noon was at 86. The loweſt the Barometer, was at 29.8, the higheſt was at 29.9.

The Dyſentery continued, and became more frequent, eſpecially among Children, but was not quite ſo malignant as in the laſt Month; for now by Bleeding once or twice, and in a chance-one thrice, a Doſe of *Ipocacuan.* and *Rhubarb* with an Opiate after it, and a few ſmall Doſes of the former after that, and antiphlogiſtick Subaſtringents with Opiates, they generally recovered. To Children, after Bleeding once or twice, a few ſmall Doſes of *Ipocacuan.* from gr. i. to gr. ij. and a little Rhubarb with an Anodyne, then *Sal. Nitre, Coral. Rubr. vel Pulv. e Bolo C.* equal Quantities, in the *Julep e Cret.* or ſuch like Mixture with an Anodyne, generally checked it, and took it off in four or five Days time.

Ophthalmies were alſo frequent, but were generally carried off by Bleeding, and two or three cooling Purges, and a cooling repelling Collyrium: And we had alſo a few Pleuriſies and inflammatory Fevers.

The continued remitting Fever which we had in May and June, and diſappeared on the falling of the Rain towards the latter End of June, and was not ſeen for near two Months, now returned again about the Middle of this Month, ſoon after the Return of the hot Wea-

ther; but now differed in ſome of its Symptoms from what it was then: Now the Fever was continual during the three or four firſt Days, and then uſually remitted regularly as it did before; but the Remiſſions were longer, and the Fever higher on its Return, which uſually continued five or ſix Hours; the Pain in the Head was greater, not only during the firſt three Days, but in the Returns of the Paroxiſms; the Pulſe was uſually quick and full at that time, in ſome it was attended with Vomiting, in few with looſe Stools; and after five or ſix Hours the Fever abated, and the Pulſe was lower, though often quick and ſmall, and in ſome a little languid, and ſome ſeemed to have little or no Fever for ſeveral Hours, as if it would intermit, but it never did; neither would ſuitable Evacuations bring it to intermit, as they often do in England: The Thirſt was great in all, even when the Fever was loweſt; the Tongue was covered with a white or brown Slough; their Sleep little, and that greatly diſturbed; ſome had nervous Twitchings and ſlight Subſultus Tendinums, but theſe moſtly in the Paroxiſms; they generally were low and languid when the Fever abated, or was moſt remiſs: And it uſually now came to a Criſis on the fourteenth Day, when properly treated, and neither raiſed too high by too warm Medicines, nor brought too low by too great Evacuations,

cuations, or over-cooling a Regimen, and was carried off by a general copious warm critical Sweat.

Thoſe who had lax, weak, or groſs phlegmatic Conſtitutions, required Medicines that were a little warmer, and ſome Volatiles, to be given with the other; when thoſe who were more plethoric, and had rigid tenſe Solids, required larger Bleeding, and Antiphlogiſticks, and ſometimes Emollients with ſome of the milder Volatiles, with ſuitable Variations *pro re nata*.

At this time ſeveral were afflicted with the Hæmorrhoids or Piles, both internal and external, which were attended with Inflammation and much Pain in thoſe Parts; which were generally removed by the Uſe of proper ſulphurous Medicines, Fomentations, &c.

The Month of September was very warm, the Wind being moſtly in the South, or in ſome of the ſouthern Points, and often attended with Thunder and Lightning, and much Rain, and often calm, or very little Wind; ſo that it was very hot. The Quantity of Rain which fell in this Month, was equal to 7.69 cubic Inches deep. The loweſt the Thermometer was in the Morning was at 78, the higheſt at 82; the loweſt it was at Noon was at 82, and the higheſt at 85. The loweſt the Barometer, was at 29 $7\frac{1}{2}$, and the higheſt was at 29.9.

Dyſenteries ſtill continued to be frequent, and now were epidemical all over the Iſland, both among the white and black People, and was often of a bad Kind, and difficult to be cured, eſpecially towards the latter End of the Diſeaſe; even after the Fever and its bad Symptoms were taken off, by Bleeding and antiphlogiſtick ſubaſtringent Medicines, it was difficult to corroborate and ſtrengthen the great relaxed State of the Inteſtines, and divert the uncommon Afflux of the Humours from them.

Some few were ſeized with the continued remitting Fever ſtill, though not many; the Symptoms were much the ſame as in the laſt Month.

And I ſaw ſeveral Patients who had both this Fever, and the Dyſentery at the ſame time, which were evidently diſtinguiſhable from each other, by their peculiar Symptoms; as a diſtinct Remiſſion of the Fever, and its returning at or near the ſame time; and moſt commonly in the Evening, as that Fever now uſually returned: When at the ſame time the Dyſentery, with great Pain in the Bowels and griping bloody Stools, continued alſo; and this laſt was moſt commonly removed; and totally ceaſed or taken off, ſeveral Days before the other Fever came to its Criſis; which it uſually did on the fourteenth Day, in this Caſe alſo, as well as when it was alone: And it has been obſerved by others, that

that two different Diſeaſes, when both were epidemical at the ſame time, frequently do partake of each other's Symptoms in the ſame Patient, at the ſame time*, as I have alſo obſerved before ||.

Several Children, and ſome few Adults, were ſeized with a Hæmorrhage from the Inteſtines, and voided conſiderable Quantities of Blood that Way, without any Fever, Sickneſs at their Stomach, and without Griping or much Pain, or much Excrement or Mucus, or any Symptoms of the Dyſentery; and ſoon were well again with only taking a little ſtyptick Tincture: And I obſerved, that ſeveral Perſons who ſeemed to be well, and walked about their Buſineſs, had unuſual looſe Stools, ſome for a longer, others for a ſhorter Time, and then ceaſed without taking any Medicines; kind Nature having thus diſcharged the infectious Matter that way, without any Aſſiſtance. And likewiſe, that thoſe who were ſeized with Pleuriſies, uſually had a Purging during the three or four firſt Days of the Diſeaſe, which then ceaſed by Bleeding, without any Medicines to reſtrain it †. I could not obſerve that we had any other epidemical Diſeaſes at this time.

* Dris. Sydenhami Opera. Dris. Rogers.

|| Hillary on the Small-Pox and epidemic Diſeaſes.

† *Query* 15. Was not this uncommon Diſpoſition and Afflux of the Humors to the Bowels, principally cauſed by the falling of ſo much Rain and cooling the Air, and thereby

In the Month of October we had frequent Showers of Rain, and ſometimes much heavy Rain, both with and without Thunder, and often much Lightning without either of them; and the Weather was cooler than uſual in other Years in this Month. The Quantity of Rain which fell in it, was equal to 5.44 cubical Inches deep. The loweſt the Thermometer was in the Mornings, was at 75, the higheſt at 82; the loweſt the Thermometer was at Noon, was at 78, and the higheſt was at 86. The loweſt the Barometer, was at 29.8, and the higheſt was at 29.9.

Upon the Weather being more cool, the continued remitting Fever totally ceaſed and diſappeared; but the Dyſentery ſtill continued, with full as bad Symptoms, and was no leſs difficult to be cured than it was in the laſt Month.

We had alſo ſome Pleuriſies and inflammatory Fevers, in ſeveral of which a Diarrhœa, and in ſome few a Vomiting accompanied them during the two or three firſt Days, but was generally abated or totally ſtayed by Bleeding; as it aroſe from too great a Plethora, the Relaxation or Weakneſs of the Inteſtines, and the unuſual Diſpoſition of the Humours to flow towards the Bowels; after which

thereby diminiſhing the Perſpiration, and turning the perſpirable Matter and Sweat too ſuddenly upon the Bowels? Eſpecially as they had been great before, and the Fluids much rarified by the preceding Warmneſs in the Months before?

which Antiphlogiſticks generally took off the Diſeaſe ſucceſsfully. I alſo obſerved the ſame Diſpoſition of the Humours towards the Bowels, in moſt other Diſeaſes; and even where a Cathartic was given in any other Caſe, that a much leſs Doſe would anſwer the Purpoſe, than uſually did at other times: And Arthriticks alſo ſuffered much from this Diſpoſition of the Humours.

During both this and the laſt Month ſeveral Perſons had a Diarrhœa alba, or white Flux, in which their Stools were more white than uſual in a Jaundice, though no Yellowiſhneſs appeared in their Skin or Eyes, neither had they Pain in the Region of the Liver, or in the biliary Ducts, nor any other icterical Symptoms; neither had they any unuſual Acidity in their Stomachs or Bowels that I could obſerve; yet their Stools were more white, than if their Diet had been only Milk, Bread and Flour, &c. and that in ſeveral Adults whoſe Diet was the reverſe; neither were their Stools chilous, as in a Lientery: But theſe were generally pretty ſoon relieved by a Vomit, or a few ſmall Doſes of Ipocacuanha, and a little Rhubarb with an Opiate.

We had frequent Showers in November, though not quite ſo much Rain as in the laſt Month; and they both were more cool than they uſually are in other Years. The Quantity of Rain which fell in this Month, was only equal to 3.75 cubic Inches deep. The

loweſt that the Thermometer was in the Morning was at 74, the higheſt at 79; the loweſt it was at Noon, was at 80, and the higheſt was at 83. The loweſt the Barometer, was at 29.8, and the higheſt was at 29.8½.

The Dyſentery ſtill continued, though not quite ſo frequent as it was in the two laſt Months, nor altogether ſo malignant, or difficult to be cured.

We had alſo a few inflammatory Fevers, and ſome Pleuriſies, Peripneumonies, and Quinſeys, towards the latter End of the Month, but not many; neither were they in general of a bad Kind, but were uſually taken off by Bleeding, and the Uſe of proper antiphlogiſtick Medicines: And no other Diſeaſes appeared which could be called epidemical.

December was in general cool, and we had frequent Showers, and ſometimes pretty heavy Rain; and on the 26th we had a Flood. The Quantity of Rain which fell in this Month, was equal to 5.44 cubic Inches deep. The loweſt the Thermometer was in the Morning, was at 74, the higheſt at 76; the loweſt it was at Noon, was at 76, and the higheſt was at 82. The loweſt the Barometer, was at 29 7½, and the higheſt was at 29.9.

The whole Quantity of Rain which fell in this Year, was but equal to 40.61 cubical Inches deep.

We

We ſtill continued to have ſome Dyſenteries, and a few Diarrhœas, though not many of either: We alſo had a few inflammatory Fevers, but they were all more mild and benign than they were in the preceding Months. Some had a Catarrh, and others a Choriza, but in ſo moderate a degree, that they were uſually carried off in a few Days, by only drinking Sack-whey, Tea, or other ſmall Liquors warm.

The Month of January was in general cool and dry; but the Inſtrument with which the Quantity of Rain falling in each Month and Year being broke, and a new one not to be had here, my worthy Friend could not carry on his Experiments any longer; ſo that I cannot give the exact Quantities this Year, but ſhall mention when we had any conſiderable Quantities of Rain; and how the Thermometer and Barometer ſtood, as I have done before.

The loweſt the Thermometer was in the Morning, was at 70, the higheſt at 75; the loweſt it was at Noon, was at 77, and the higheſt at Noon was at 80. The loweſt the Barometer, was at 29.8, and the higheſt at 29.9.

The Diſeaſes we had in this Month were moſtly of the inflammatory Kind, and chiefly thoſe which affected the Head and Breaſt; though in the preceding Months, the Humours had an uncommon Afflux towards the Bowels,

Bowels, and lower Parts of the Body, during the wet Seaſon; but it being now cool and dry, the Humours ſeemed to take a different Turn towards the ſuperior Parts, and fell principally upon the Head and Breaſt, and produced Catarrhs, Choriza's, Quinſeys, Peripneumonies, Pleuriſies, and Paraphrenitiſes, all which are Diſeaſes of the inflammatory Kind; but the Pleuriſies were moſt of them of the Nothous Kind, and ſo were ſome of the Peripneumonies, and did not require ſo large Bleeding, eſpecially the firſt; after which it was uſually carried off by the Uſe of antiphlogiſtick Pectorals with ſome Volatiles, and an antiphlogiſtick Purge or two; for theſe ſeldom expectorated any thing material, neither were expectorating Medicines of much Service, when they were given, as I obſerved in ſeveral where they had been given before I was called to them. The other inflammatory Diſeaſes were generally carried off by Bleeding, and a free uſe of Antiphlogiſticks.

The Month of February was alſo cool and dry, except that on the 18th Day a conſiderable quantity of Rain fell.

The loweſt the Thermometer was in the Morning, was 70, the higheſt at 75; the loweſt it was at Noon, was at 76, and the higheſt was at 80. The loweſt the Barometer was at 29.8, the higheſt was at 29.9½.

This Month was cool and pleaſant, and more healthful than any time that I can remember

member in the ten Years paſt; as we had no Diſeaſes which could be ſaid to be epidemical, except a Fever of the inflammatory Kind, which ſeized ſome Children and young People, and but very few Adults: It uſually came on with a gentle Chillineſs, not a Rigor, which ſeldom continued more than half an Hour, with a little Sickneſs at their Stomachs, after which a Fever came on, with a quick, and moſtly a full Pulſe, great Heat, and ſoon after a Pain in one Thigh, Leg, and Foot; in ſome in one Arm, not in both theſe, nor in both Legs, nor both Arms; and as the Fever increaſed, the Pain in the Leg, or in the Arm, increaſed and ſwelled and looked very red, like that of the ſcarlet Fever, or rather like that of the Elephantiaſis Fever, but it was not that Fever; in ſome the Fever was ſo high as to cauſe them to be delirious, in others to be comatoſe; in ſome a Cough came on, at the firſt, with it, in others the Cough did not come on till the third or fourth Day, and in ſome was very troubleſome, in others it was much leſs ſo; after Bleeding once moderately, and giving ſome Antiphlogiſticks, the Fever began to abate, and the Swelling and Inflammation in the Leg or Arm increaſed, and looked very red, and as that increaſed, the Fever abated, and gradually went off in ſix or ſeven Days time; and the Swelling and inflamed Redneſs on the Leg or Arm went off alſo, with the Uſe of emollient, apperient Fomentations, and

and incouraging the Part to ſweat after fomenting it, by keeping it warm in Flannel, in a few Days time, and then the Cuticula peeled or ſcaled off; and they were well.

When this Fever was treated with Alexipharmic Medicines, or a hot Regimen, as ſome did, the Inflammation and Fever were increaſed, and it generally ended in an Abſceſs, which being opened, it diſcharged much Matter for a conſiderable time, and greatly reduced the Sick; and did not relieve them near ſo ſoon, as when it was carried off by ſweating the Part, as above, in the way which Nature indicated, neither did they recover near ſo ſoon. Others were ſo imprudent as to give the *Cortex Peruviana*, upon the abating of the Fever; which produced irremoveable Obſtructions, (as the great *Profeſſor Boerhaave* ſays it will in ſuch inflammatory Caſes, as I have ſeveral times ſeen it, and ſometimes predicted its doing ſo) which ended in a large Abſceſs, or Abſceſſes, from which, when they lay deep, the acrid Matter was abſorbed, and produced a violent hectic Fever, which, with the great Diſcharge from the Abſceſs, ſunk the Patient in a ſhort time.

Some People had only a troubleſome Cough a few Days, without any Fever, and a Swelling in the Hand or Arm came on; upon which the Cough abated, and went gradually off as that increaſed, as alſo did the Swelling

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in a few Days after that; ſo that this was ſomething of the ſame Diſeaſe, but in a much eaſier Degree; and ſome had Abſceſſes, who neither had the Fever nor the Cough; Nature being thus diſpoſed to caſt off, whatever was thus injurious or offenſive to her, whether it was from the Air, or from ſome kind of infectious Miaſma, or from whatever other Cauſe it aroſe, by ſuch an imperfect Criſis, in this manner.

We alſo had ſome inflammatory Rheumatiſms, more than uſual in this warm Climate; but they were generally carried off, by bleeding, a cooling Cathartic or two, and an Anodyne after them, as Dr. *Sydenham* adviſes, and the Uſe of antiphlogiſtick Medicines.

The Month of March continued to be very dry, and more cool than uſual; tho' we had ſometimes a few ſmall Showers in the Nights.

The loweſt the Thermometer was in the Morning, was at 73, the higheſt at 76; the loweſt it was at Noon, was at 78, and the higheſt at Noon was at 81. The loweſt the Barometer, was at 29.8½, and the higheſt at 29.9½.

The State of Diſeaſes continued to be much the ſame as in the laſt Month.

The Month of April was alſo very dry, and likewiſe cool till near the latter End of it, when it began to be ſomething warmer, but dry. The loweſt the Thermometer was in the Morning, was at 74, the higheſt at 76; the loweſt

loweſt it was at Noon was at 79, and the higheſt was at 82. The loweſt the Barometer, was at 29.8½, and the higheſt was at 29.9½.

Theſe two Months continuing to be very dry and cool till near the latter End of the laſt, the Diſeaſes that were epidemical, were chiefly of the inflammatory Kind, tho' they were not many; Coughs and Catarrhs were the moſt frequent, and we had a few Quinſeys, Peripneumonies, and inflammatory Rheumatiſms, and a few Paraphrenitiſes; but the depuratory Fever, before mentioned, wherein the morbid Matter was caſt upon the Leg or Arm, continued to be frequent in both theſe Months, and appeared with the ſame Symptoms as in the preceding Month; but as the Weather became more warm towards the latter End of this Month, the Coma attending it was more frequent, and ſomething greater, ſo that the Patient uſually lay as if aſleep, and if awakened, he inſtantly doſed and ſlept again, and continued ſo till the Leg, or Arm became inflamed, and as that Inflammation increaſed, the Coma abated, and the Fever alſo, and both went off, and the Inflammation alſo after that, as before deſcribed.

Gentle cooling Diaphoretics, as the ſaline Julep of *Sal. Abſinth. Succ. Limon.* &c. and Diluents, were the moſt efficacious; tho' it was moſt commonly neceſſary to add Antiphlogiſticks, eſpecially to ſome to abate the too great

great Violence of the Fever, and alſo to bleed them; but to others who had lax, weak Conſtitutions, it was ſometimes better to omit Bleeding, and moſt of the Antiphlogiſticks, and only give the ſaline Mixture, or to add *Acet. Camphorat, vel Spir. Mindereri*, to aſſiſt Nature to carry off the morbid Matter in the way which ſhe indicated.

The Month of May alſo continued to be very dry, and more warm, ſo that the Face of the Earth was burned brown; and ſcarce any thing appeared green, except the Trees, Shrubs, and ſome of the Sugar Canes; and moſt Ponds of Water were dried up; and we had very little Rain in all this Month.

The loweſt the Thermometer was in the Morning, was at 76, and the higheſt at 79; the loweſt it was at Noon, was at 82, and the higheſt was at 85. The loweſt the Barometer, was at 29.9, and the higheſt was at 30.

This great Drought continuing, and it being more warm, inflammatory Diſeaſes increaſed, and became much more frequent; as Peripneumonies, Pleuroperipneumonies, and Pleuriſies; in which the Fever was generally high, the Pulſe quick, full, and moſt commonly hard; and their Blood was ſizy and much inflamed. In the Peripneumonies, it appeared, from the Symptoms attending, that the Obſtruction and Inflammation was more in the ſmall Branches of the pulmonary Arteries, than in the Branches of the Bronchial Arteries;

Arteries; but it very often was in them both, which always renders the Diſeaſe much more dangerous, and often fatal, if not timely relieved by bleeding very largely, at the very firſt Appearance of its Symptoms: And this, with repeating it in ſome Caſes, and a liberal Uſe of attenuating Antiphlogiſtics, as the *Sal. Ammoniac*, *Sal. Nitre*, *Spir. Mindereri*, &c. and diluting plentifully; alſo the Fumes or Steams of warm Water and Vinegar received into the Lungs by the Breath, with Fomentations to the Breaſt, were the moſt efficacious both in the Peripneumony, and Pleuroperipneumony, and if uſed plentifully, in time, were generally ſucceſsful.

In ſome of theſe Patients, an eryſipelatoſe Eruption appeared about the Breaſt, and in others on ſeveral Parts of the Body, on the fifth or ſixth Day of the Diſeaſe, which greatly relieved their Breathing, as the great *Hippocrates*, and alſo *Aræteus Capadox*, both obſerve*; and I found that the Fever alſo, and all its Symptoms were conſiderably abated by and after that Eruption, eſpecially when it was aſſiſted by the above Antiphlogiſtick attenuating Medicines, and the Uſe of aperient ſudorific Fomentations to the Breaſt, or Parts where it appeared, and alſo by bathing their Feet and Legs in the ſame Decoction, or Fomentation, as they all greatly contributed to expel

* Hippocrat. Aretæus Capadox. Cap. de Pluritid. et in Cap. de Pulmonar.

expel that eryſipelatoſe Humour from the Lungs, to the external and remote Parts of the Body; agreeably to the Advice of the great *Hippocrates* in *Epidem.* Lib. vi. Sect 2.

Some few were ſeized with a Fever, which firſt came on with a Chilline ſs or gentle Rigor, which was ſucceeded by a hot Fever, in ſome the Heat was more intenſe, and more moderate in others, but in all with great Pain in the Head, Back, and Limbs; a little Sickneſs at their Stomachs; their Pulſe was quick, full, and moſtly hard; their Blood was generally of a florid red Colour, in ſome a little ſizy, but not ſo much ſo as in thoſe who had the Peripneumony.

Bleeding once, or thoſe who were plethoric, or had ſtrong elaſtic Fibres, twice, in order to keep the Fever moderate; then giving the above antiphlogiſtic Medicines pretty freely, uſually carried the Fever regularly on, and moſt commonly brought it to a Criſis on the ſeventh Day, when it went off by a copious warm critical Sweat.

Several Children, and ſome few Adults, were ſeized with a fluſhing Heat and great Redneſs in the Face and Head, both which ſwelled conſiderably, but no Bliſters or eryſipelatoſe Eruptions, like what is uſually called St. Anthony's Fire appeared, with a little Pain in the Head; ſome were a little feveriſh, others had no Fever; this Swelling continued four or five Days, and then went gradually off by in-

ſenſible Perſpiration, without much Medicine. It was of the eryſipelatoſe Kind, tho' no Eruption appeared, but the Humour paſſed off through the Pores without it; and the Humours continued during this dry warm Seaſon, to have an unuſual Tendency and Afflux towards the Head.

The Month of June was moſtly dry, tho' we ſometimes had ſome ſmall Showers of Rain, and ſome moderate cool Winds.

The loweſt the Thermometer was in the Morning, was at 78, the higheſt at 80; the loweſt it was at Noon, was at 80, and the higheſt was at 86. The loweſt the Barometer, was at 29.8½, and the higheſt, was at 29 9½.

The before mentioned depuratory Fever ſtill continued, but was ſomething leſs frequent than it was in the two laſt Months; and we ſtill had ſome inflammatory Fevers, as Peripneumonies, Pleuro-peripneumonies, and Quinſeys; tho' not quite ſo many as we had in the two laſt Months; but the Inflammation and Fever in thoſe who had them, were full as great, and their Blood when cold was covered with an inflammatory, ſizy, Buff-like Pellicle, and their Pulſe was generally full, quick, and hard, and accompanied with great Pain in the Head, as well as in the Breaſt, or Side. And theſe were not relieved, and the Diſeaſe taken off without bleeding largely, and that repeated ſeveral times in

ſome

ſome Caſes, and a liberal Uſe of Antiphlogiſticks, given in large Doſes, and that every two Hours, or oftener; by which the Inflammation and Fever were generally taken off, and they recovered much ſooner*. And I muſt obſerve, that theſe antiphlogiſtick Medicines are uſually given in ſuch ſmall trifling Doſes, eſpecially by ſome, in this Iſland, and I believe in moſt other Places, that they do but little Service, eſpecially where the Inflammation is great, and the Fever violent; neither can they take off the Inflammation and conquer the Fever, unleſs they are given in much larger Doſes, and much more frequently alſo in ſome Caſes. I have ſeen a Pleuriſy attended with a violent Inflammation and Fever, and very acute Pain, and the Patient's Blood ſizy like Buff, taken off by bleeding once to ℥xxiv, and giving *Sal. Nitri* ʒj. *Sal. Ammoniac. Crud. depur. gr.* xij. *vel.* xiv. in a Draught of *Decoct. Pectoral. cum Spir. Nitri Dul. Spir. Mindereri* every Hour, in the firſt twelve Hours, and every two or three Hours after, till the Patient had taken

* *Query* 16. Were not theſe inflammatory Diſeaſes cauſed or produced, by the long continued great Drineſs of the five preceding Months, by which the animal Fibres were ſo braced up as to be ſo tenſe and elaſtic, as to be ready to produce an Inflammation from the leaſt accidental Cauſe, as being too much heated by Exerciſe, or too ſuddenly taking cold, when hot, or being wet, or any other way ſtopping the Perſpiration, and ſo increaſing the Momentum of the Fluids?

ſixteen or twenty Doſes, in the Space of thirty-ſix Hours; whereas if they had been given in the ſmall, or even in the uſual, Doſes, they could have had little Effect in that Caſe, even in a much longer time; tho' by thus giving them, the Pleuriſy was taken off, and the Fever alſo, in the Space of thirty-ſix Hours time.

The Beginning of July was alſo dry, but we had frequent Showers after, and ſometimes pretty heavy Rain, ſo that in the whole we had a good deal of Rain in this Month, and it was more cool than the laſt Month.

The loweſt the Thermometer was in the Morning, was at 78, the higheſt at 79; the loweſt it was at Noon, was at 80, and higheſt was at 84. The loweſt the Barometer, was at 29.8½, and the higheſt was at 29.9½.

The depuratory Fever ſtill continued in this Month, but after the falling of the Rain, it varied ſomething in ſeveral of its Symptoms, from what they were in the preceding dry Months; it now came on with a moderate but greater Rigor, which uſually continued about an Hour, and then was ſucceeded by a more hot Fever, with a full, quick, and moſt commonly a hard Pulſe; great Thirſt, and great Pain in the Head and Back, and in ſome in the Limbs, and ſome were delirious; ſome had a hot dry Skin, others ſweated freely; their Blood was generally ſizy and covered with a Buff-like Pellicle.

licle. This continued in ſome but one Day, but moſt commonly four or five Days, and then Nature depoſited the morbid Matter on the Thigh, Leg, or Arm, and very rarely on any Gland or glandulous Part, as ſometimes happens in ſome other Fevers, where it now uſually formed an Abſceſs, and did not go off by Sweating, as it did in the preceding Months; and as the Inflammation in the Thigh, Leg, or Arm increaſed, the Fever abated, and when the Tumor ſuppurated and the Abſceſs was formed and opened, the Fever went entirely off.

Towards the latter End of the Month*, after a conſiderable Quantity of Rain was fallen; ſome Dyſenteries began to appear, but they were not attended with any Symptoms more than uſual.

* On the 29th of this Month, we had an Earthquake in Barbadoes, which continued a little more than half a Minute: The Houſes ſhook very much; but none fell, tho' ſome were expected to fall, and the Earth ſeemed to riſe and fall as if ſome large Body had been rolled on under its Surface; and a grumbling Noiſe was heard in ſeveral Places, in the Earth, like the Noiſe of ſeveral Carriages paſſing on the Streets, or like a Drum, or Thunder at a Diſtance. The Motion cauſed many People to be giddy, and ſome to be ſick and vomit, for ſome time after it was over. I could neither obſerve any ſulphurious or other Smell to ariſe from the Earth, or to be in the Air, either during its Motion, or after it was over. Neither could I obſerve any Alteration in the Diſeaſes then reigning, or in thoſe that followed after it, which could be rationally aſcribed to its Effects, or to be cauſed by it.

The Month of Auguſt was in general dry and warm, tho' we had ſome ſmall Showers, and Lightening often, and ſometimes ſome Thunder; and on the 20th and 31ſt Days we had much Rain; and it was cooler.

The loweſt the Thermometer was in the Morning, was at 46, the higheſt at 80; the loweſt it was at Noon, was at 78, and the higheſt was at 85. The loweſt the Barometer, was at 29.8, and the higheſt was at 29.0.

Upon the falling of this Rain, ſome Diarrhœas appeared, and the Dyſentery became more frequent, eſpecially among the Negroes; and I obſerved, that when the Dyſentery got into an Eſtate among the Negroes, it generally became infectious and ſpread amongſt them, ſo that many more were ſeized with it, and in ſeveral it was now attended with very bad Symptoms. And I have obſerved the ſame in ſome other Years, tho' not in all Years.

Bleeding once or twice, and vomiting, and a Doſe of Rhubarb with an Anodyne; then giving ſome ſmall Doſes of Ipocacuanha, and Anodynes with ſubacid Reſtringents after them, and ſome healing Balſamicks at the laſt, were generally ſucceſsful.

Inflammatory Fevers were alſo frequent, as, Quinſeys, Pleuriſies, Peripneumonies, Pleuro-peripneumonies, and Rheumatic Fevers; in all which, their Blood was generally much

much inflamed; and they moſtly required repeated Bleeding, and Antiphlogiſticks to be given liberally, and when they were ſo given, they generally were ſucceſsful.

The Depuratory Fever alſo continued to ſeize ſeveral People in this Month, and after it had continued one Day in ſome, in others two or three Days, the morbid Matter was caſt upon ſome muſcular or fleſhy Part of the Body, and not upon any Gland as obſerved before, which is more uſual in other Fevers, and in other Years, where it now formed a hard Tumour, which was difficult either to be ſuppurated, or to be diſperſed; for it now often did not ſuppurate, but diſperſed, but not eaſily, nor in a ſhort time; which is ſomething uncommon; however, as thoſe Tumors roſe, the Fever abated much, and as they ſuppurated, or diſperſed, it went entirely off.

The Beginning of September was hot and dry till the tenth Day, after which we had much Rain, almoſt every Day, and ſometimes much Thunder and Lightening; and the Rain continued, at times, to the End of the Month, which rendered it more cool than this Month uſually is in other Years.

The loweſt the Thermometer was in the Morning, was at 77, the higheſt 80; the loweſt it was Noon, was at 76, and the higheſt was at 85. The loweſt the Barometer, was at 29.8, and the higheſt, was at 29.9.

As this Month continued to be wet, and more than uſually cool, Dyſenteries became more frequent, and were attended with ſome bad Symptoms, and were fatal to ſome Patients. We alſo had ſome Pleuriſies, Peripneumonies, Pleuro-peripneumonies, and inflammatory Fevers; in which their Blood was moſt commonly much inflamed, and covered with a Starch-like, or Buff-like Pellicle. Some few were alſo ſeized with the beforementioned Depuratory Fever; and the Tumors could now very rarely be brought to ſuppurate, and it often was a conſiderable time before they could be entirely diſperſed, even tho' the Patient was recovered, and otherways well.

Not long after the Rain began to fall, many were ſeized with a catarrhal Fever; in ſome it was moderate, and they only had a Cough, Hoarſneſs, and a Choriza, which went off in a few Days; but others were taken with a cold Rigor, which uſually continued half an Hour or an Hour, and was ſucceeded by a hot Fever, with a great Defluxion of Rheum on the Bronchia and Lungs, and a violent Cough; they expectorated little the firſt two or three Days, but conſiderably more afterwards; it was frequently accompanied with a Peripneumony, or a Pleuro-peripneumony, in which the Bronchia and Lungs were much inflamed; and their Blood was covered with a Starch or Buff-like Pellicle. Theſe required pretty

pretty large Bleeding, and a liberal Uſe of antiphlogiſtick Pectorals; and with which they were moſt commonly relieved.

Towards the latter End of this Month, ſome few Patients, in the North Part of this Iſland, were ſeized with a putrid Synochus Fever: but it neither continued long amongſt them, nor did it ſpread further into any other Parts of the Iſland.

We had a good deal of Rain in the Month of October, and it was alſo more cool in general, than is uſual in this Month.

The loweſt the Thermometer was in the Morning, was at 76, the higheſt at 80; the loweſt it was at Noon, was at 78, and the higheſt at 84. The loweſt the Barometer, was at 29.8, and the higheſt at 29.9.

Dyſenteries ſtill continued, but were leſs frequent then they were in the two preceding Months. And the depuratory Fever which we had in the three or four laſt Months, now totally diſappeared.

But the catarrhous Fever became more frequent, ſo that few eſcaped having either more or leſs of it, as in the laſt Month; tho' in ſome it only appeared as a common Cold, and went off in the ſame manner; but in ſome, the Catarrh with a Colluvies of ſharp ſerous Humour fell upon the Bronchia and Lungs, and produced a Peripneumony with a violent Cough, great Inflammation, with great Difficulty of Breathing, and all the other

Symptoms of that Diſeaſe. In ſome others it fell upon the Pleura, and produced a Pleuriſy, with its Symptoms; and in ſome few, on the Mediaſtinum and Pericardium, and produced a Paraphrenitis: In all which the Inflammation was generally great, and their Blood much inflamed, and more or leſs ſizy.

In ſome others the Inflammation was general, and did not fix upon any one Part of the Body; but they had a Fever with great Pain in the Head, and ſometimes all over the Body, a quick full Pulſe, and ſome were ſometimes delirious, or comatous, for the Head was uſually moſt affected; their Blood was inflamed, and very florid, but not ſizy as in the others above-mentioned. In theſe, after Bleeding once, and the Uſe of Antiphlogiſticks, the Fever generally went off by a copious warm critical Sweat on the fifth Day. Some had this Fever in a much eaſier Degree; they only had a feveriſh Heat, with a fluſhing red Colour in their Face, a Pain in the Head, with a quick Pulſe, which continued a few Hours, and then abated for a few Hours, and returned again in the ſame manner ſeveral times, and at laſt went off by a critical Sweat on the fifth Day, as in the others. But thoſe who had the Peripneumony, Paraphrenitis, and the Pleuriſy, required much larger Bleeding, and that very early in the Diſeaſe, and ſometimes repeating it, and a more liberal and plentiful Uſe

of

of the Antiphlogiſticks, by which, if taken in time, they uſually recovered.

The Dyſentery became more frequent towards the latter End of the Month, than it was in the Beginning of it, and was now ſometimes accompanied with the laſt-mentioned inflammatory catarrhous Fever, and uſually had more Symptoms of that Fever in the firſt two or three Days, and then it all turned upon the Bowels, with a Purging, which did not carry that Fever off; but it increaſed and appeared with all the Symptoms of the Dyſentery, accompanied with much griping Pain, and bloody Brine-like frequent Stools, *&c.* In theſe, Bleeding, and the Methods hereafter mentioned in the Treatiſe on that Diſeaſe, were uſually ſucceſsful.

The aſthmatic and conſumptive Patients ſuffered much from this catarrhous Fever, and it proved fatal to ſome of them.

Alſo the arthritic and rheumatic Patients, had more ſevere Attacks of thoſe Diſeaſes, than they uſually had in other Years.

And I obſerved that, in general, the Inflammations attending all the inflammatory Diſeaſes at this time, were more violent than uſual, and their Blood was more ſizy, and covered with a thicker Buff-like Pellicle; and that they required more copious Bleeding before the Diſeaſes could be taken off, than

they did in other Years * in this warm Climate, at leaſt ſince I came into this Country.

The Month of November was, in general, warmer than the two preceding Months, probably from the Wind's being often more ſoutherly, though we had more Rain in it, eſpecially towards the latter End of it, than we uſually have in moſt other Years.

The loweſt the Thermometer was in the Morning, was at 76, the higheſt at 78; the loweſt it was at Noon, was at 79, and the higheſt was at 82. The loweſt the Barometer, was at 29.7½, and the higheſt at 29,8½.

The Dyſenteries, which began to increaſe towards the latter End of the laſt Month, continued to be more frequent moſt of this; but

* *Query* 17. Did not all theſe inflammatory Diſeaſes ariſe from, or were much increaſed by, the long continued dry warm Weather, during the laſt ſix Months, which had braced up the animal Fibres, and rendered them more rigid and elaſtic, and the Fluids more denſe and dry, and conſequently both more fit to produce inflammatory Diſeaſes, tho' they did not much appear till after the falling of the Rain, which rendered the Air more cool and moiſt, and thereby contracted the perſpiratory Pores, and conſiderably diminiſhed that Excretion; did not theſe two Cauſes, thus acting the ſame way at the ſame time, the one to obſtruct the Perſpiration, and the other to increaſe the Momentum of the circulating Fluids, by thus jointly acting, produce all the above-mentioned inflammatory Diſeaſes? And as theſe Cauſes were long continued, were not their Effects greater and the Inflammations in general much greater, and the Diſeaſes more violent?

but they began to abate again towards the latter End of this Month alſo. And the catarrhous Fever, which was ſo frequent in the preceding Months, continued to be ſo ſome Part of this; but it greatly abated, and became much leſs frequent towards the latter End of it, and totally diſappeared and left us in the following Month.

Some few were ſeized with a Fever, which at the firſt uſually appeared in a very irregular Manner, and ſometimes with ſomewhat different Symptoms in one Patient, to what it did in others; but in general it ſeemed to be the neareſt to what the Greeks call a ἡμιτριταῖον or ſemi-tertian Fever. It moſt commonly appeared in all, like a continual Fever during the firſt four, five, or ſix Days, and then ſeemed to remit like what the Greeks call a συνεχὲς, or a continued remitting Fever, and in moſt continued ſo, with the uſual Symptoms of that Fever for ſeveral Days, and much longer in ſome, eſpecially if improperly treated. In others it had more of the Appearance and Symptoms of a ſemitertian Fever, but rarely or never came to intermit regularly; for intermitting Fevers are very ſeldom or never ſeen in this Iſland now, unleſs they are brought from ſome of the other leſs cultivated Iſlands, or from ſome other Place; though it is ſaid that they were more frequent here before this Iſland was cleared of its Wood, and cultivated. In this

this Fever their Pulſe was quick and full, and ſometimes a little hard; they had a great Pain in their Head, Back, and moſt commonly all over them, eſpecially in their Knees and Joints; their Blood was florid and inflamed, but rarely covered with a ſizy inflammatory Pellicle.

Bleeding them once at the Beginning of the Diſeaſe, and the Uſe of attenuating Antiphlogiſticks, generally brought the Fever either to remit regularly, or to appear as a regular ſemi-tertian Fever; and then they both were uſually taken off by giving ſaline Draughts, or the following ſaline Mixture, which laſt I found to be the moſt efficacious. ℞ *Flor. Chamæmeli. Fol. Menthæ. ana.* Mi. *Infund. in Aq. Bull. q. ſ. ut Col.* ℥xvi. *Colaturæ adde Aq. Menthæ Spir.* ℥iſs. *Sal. Abſinth* ℥ſs. *Syr. e Mecon.* ℥iſs. *Elix. Vitrioli Acid. q. ſ. ut reducet. Sal. Alkal. ad Stat. nutralem; miſce, exhibe Cochl. tria vel quatuor tertia quaq; hora.*

In ſome few the Fever remitted pretty regularly from the Beginning, but it never came to intermit; though ſome Evacuations were uſed to ſuch to bring it to intermit, as they uſually bring this Fever to intermit in England, but would not do it in this warm Climate: But the above ſaline Mixture took the Fever quite off in all that I ſaw.

The Month of December was more cool than the laſt Month, and it was often cloudy,

and

and we had much more Rain than uſual in this Month, in other Years; as alſo ſtronger or higher Winds, eſpecially towards the latter End of it.

The loweſt the Thermometer was in the Morning, was at 73, the higheſt was at 77; the loweſt it was at Noon, was at 78, and the higheſt at Noon was at 82. The loweſt the Barometer, was at 29.7½, and the higheſt was at 29.8½.

Dyſenteries, which were frequent in the Beginning of the laſt Month, but began to abate towards the latter End of it, almoſt totally ceaſed in this.

Some few had the continued remitting Fever, as in the laſt Month; and in two or three Patients it now changed to a regular intermitting quotidian Fever: And I ſaw two Patients who had an intermitting Quotidian, without having the remitting Fever before it; and theſe were the firſt regular intermitting Fevers that I have ſeen in this Iſland, except ſuch as were brought hither from ſome other Places.

And the Bark did not anſwer in any of theſe, ſo as to take the Fever off, as it uſually does in England; or as it generally did in thoſe intermitting Fevers which were brought hither, or as it is ſaid to have done in thoſe who had this Fever here formerly: Though various Things were now given with the Bark, in order to make it more effectual; as *Elix. Vitrioli*

trioli Acid. Camphor. the fixed alkaline and volatile Salts, Allum and Nutmeg, &c. and cold Bathing. Though the Fever was but moderate, the cold Fit continuing about half an Hour, and the hot Fit four or five Hours, and then it went entirely off by Sweating, as uſual, and left the Patient free from any Fever for the Space of fifteen or ſixteen Hours; yet the Bark would not anſwer, though very good: But the following Decoction took it off after giving a Vomit; though a Vomit had been given before the other Medicines alſo. ℞ *Rad. Serpent. Virg.* ʒſs. *Sal. Abſinth.* ʒii. *Miſce, Coq. in Aq. pur.* ʒxx. *ad* ʒxii. *et cola; Colaturæ adde Tinct. Terræ Japon.* ʒi. *Miſce, Exhibe* ʒii. *ſingulis bihoris, vel tertia quaq; Hora abſente Paroxiſmo.* And I found this the moſt ſucceſsful; and I added *Cortex Peruv.* ʒi. to this Decoction for ſome of them, but I did not find that it anſwered better than the other.

1758. January was more dry, and alſo cooler than the laſt Month, though we had ſometimes ſome ſmall Showers of Rain in it.

The loweſt the Thermometer was in the Morning, was at 72, the higheſt at 76; the loweſt it was at Noon, was at 76, and the higheſt at Noon was at 81. The loweſt the Barometer, was at $29.7\frac{1}{2}$, and the higheſt was at $29.9\frac{1}{2}$.

The Dyſentery, which began to abate in the laſt Month, now totally ceaſed and diſappeared in this.

Several

Several Children were ſeized with an uncommon Diſorder in this Month, and we had it among Children here, about ſix or ſeven Years ſince; but I do not remember to have ever ſeen it in England, or elſewhere. It chiefly, if not ſolely, ſeizes Children; for I never ſaw any but them have it, and none that were above ſeven or eight Years of Age: They ſeldom complain, or ſeem to be much uneaſy or unwell, till after a great Number of ſmall angry inflamed Eruptions, like little Boils appear on the Head, Neck, and Face, but moſtly on the Forehead and Head; and it is moſt frequent in thoſe who have had a common ſore Head, as Children ſometimes have, for ſeveral Days or Weeks before theſe appear: Some chance one or two of theſe Boils ſuppurate tolerably well; but in general moſt of them do not, but contain a ſmall tough white or yellowiſh Core, and not concocted Matter: Upon, or a little before theſe Eruptions appear, the Humour which uſed to be diſcharged from the ſore Head, ſuddenly dries up, or ſtrikes in, and the Boils turn to a livid or blackiſh Colour, and the Skin round them to a ſmall Diſtance turns pale, and the Boils begin to gangreneſce; and they now begin to be a little feveriſh, and have a little, ſmall, quick Pulſe, which is moſtly low, and they have a great inward Heat, and Thirſt, though not the laſt always; yet the

external Heat is ſometimes leſs than in Health, and ſometimes the Extremities are cold, tho' the Pulſe is quick, but ſmall and low: In ſome the Feet and Hands begin to ſwell, and look pale as if œdematous or dropſical, or as ſometimes comes on a Limb before it begins to mortify; a Stupor or Coma comes on, and the Scalp becomes more livid, and a Mortification, or even a Sphacelus down to the Cranium, if not on the Brain, comes on alſo, and they die.

I have known ſome, who upon the Humour's ſtriking in, have had all their Limbs become numb, like a ſlight Paraplegia, but not a total Loſs of either Senſation or Motion, as in a compleat Paraplegia, yet they were numb, and in part paralytic: This is a very bad Symptom; but the Coma with a great Lividneſs of the Cranium, and the œdematous Swelling of the Hands and Feet, are worſe, and almoſt certainly preſage the Death of the little Patient, in thirty or forty Hours time, or ſooner. I have been called to ſome in this State, when too late, and have found theſe Symptoms, and the Scalp down behind the Ears as low as the Neck, quite livid and almoſt black and mortified, if not ſphacelated down to the Cranium; and from the Coma, great Stupor and Inſenſibility of the Patient, I judged that the Mortification extended to the Brain, or its Meninges.

In

In ſome the Fever is a little higher, the Pulſe ſtronger and a little fuller, and the Heat greater, and more equally diffuſed all over the Body, and to the Extremities; and theſe, provided that the Fever is not very high, which rarely happens, are in leſs Danger, and if properly treated in time, moſt commonly recover.

The Intentions of Cure, are to keep the Vis Vitæ and the Fever moderate, neither too high, nor to let it ſink too low (which is the greateſt Danger) and bring on a Mortification, which, in that vital Part, muſt almoſt certainly end in Death. All the whole Tribe of the *Teſtacea* which are uſually given to Children, and in ſome Caſes are of great Service to them, here have no Place, and are more hurtful than uſeful, as being Scepticks; and the acrid Antiſcepticks are in general too acrid for their tender Stomachs: But as the great Diſpoſition and Tendency to bring on a Mortification on the Parts affected, evidently indicate the beſt and ſtrongeſt Antiſcepticks to be given, provided that they are neither too acrid, nor too ſtrong for ſuch young tender Patients; as, a light Decoction or Infuſion of the *Cortex. Peruv. Rad. Serpent. Virg. Croci Anglic. Vinum Croceum, Spir. Mindereri, Spir. Lavendul. C.* &c. properly adapted to the Age and Strength of the Child, are the moſt ſuitable, and promiſe the

beſt Succeſs: And a warming Fotus to the Head, made of aromatick antiſceptick Herbs, *as Fol. Piementi, Viburnii Salvæ Roriſmarin. Flor. Chamemel. Sambuc.* &c. applyed warm three or four times a Day; and opening the Boils with a Launcet, as ſoon as they are ripe and fit to be opened, and dreſſing them with a warm Digeſtive, as *Liniment. Arcæi,* &c. and then covering the Dreſſings and the whole Scalp, with the *Cataplaſm. maturans.* I have found this Method, if taken in time, always to be the beſt and the moſt ſucceſsful.

Towards the latter end of this Month, the exanthematous Eruption, commonly called the Chicken-pox, began to appear again in ſome Parts of the Town.

The Month of February was more dry than the laſt Month, and continued to be cool and pleaſant Weather; though we had ſome ſmall Showers.

The loweſt the Thermometer was in the Morning, was at 72, the higheſt at 74; the loweſt it was at Noon, was at 76, and the higheſt was at 80. The loweſt the Barometer, was at 29.8½, and the higheſt was at 29.9½.

As this Month was in general very dry, and alſo moderately cool and pleaſant Weather, it was alſo very healthful; ſo that we had not any Diſeaſes which could be properly called epidemical, except the above-

mentioned gangreneſcent Boils on the Heads of Children, which ſtill continued, and were fatal to ſome; and the Chicken-pox.

March continued to be very dry, rather more dry than the preceding Month, and likewiſe cool and pleaſant Weather.

The loweſt the Thermometer was in the Morning, was at 73, the higheſt at 76; the loweſt it was at Noon, was at 78, and the higheſt at Noon was at 81. The loweſt the Barometer, was at 29.8½, and the higheſt at 29,9½.

This Month was alſo no leſs pleaſant and healthful than the laſt, for we had no Diſeaſes that were epidemical in either of them, except the above gangreneſcent Boils, and the Chicken-pox; till after the Middle of the Month, when ſome few were ſeized with Coughs and Catarrhs, and a few had a Quinſey; but theſe were neither bad, nor many, neither did they continue long, for they as well as the gangreneſcent Boils and ſore Head, all diſappeared before the End of the Month, and the Seaſon became very healthful.

The Month of April alſo continued to be very dry, though we ſometimes had ſome Clouds, yet we had little or no Rain; and towards the latter End of the Month, the Weather grew very warm, as uſual at this Time.

The loweſt the Thermometer was in the Morning, was at 75, the higheſt at 79; the

loweſt it was at Noon, was at 78, and the higheſt was at 84. The loweſt the Barometer, was at 29.8, and the higheſt was at $29.9\frac{1}{2}$.

The Seaſon continued to be pretty healthful moſt of this Month, but the Weather begun to be warm towards the latter End of it; when ſome few inflammatory Diſeaſes began to appear, as a few Pleuriſies, Peripneumonies, and ſome few Quinſeys, but not many; but ſeveral Children were ſeized with a ſuffocating Catarrh, in which the Glotis, Epiglotis, Bronchia, and ſometimes the Lungs, were much inflamed, and they breathed with much Difficulty, though they could moſt commonly ſwallow Liquids tolerably well; their Pulſe was quick, and moſtly full and hard, their Blood was inflamed, florid, and denſe, and generally ſizy ſoon after; their Skin was hot, and the Fever and Inflammation uſually high. It generally ſeized Children of two or three Years old, and thoſe that were younger; and when the Inflammation of the above-mentioned Parts was great, it ſoon ſuffocated them, if not ſpeedily relieved by Bleeding, and the Uſe of Antiphlogiſticks, &c. and ſeveral young Children died of it. Thoſe who were elder, eſpecially if almoſt grown to be young Men and Women, got more eaſily over it, and ſoon recovered by the following antiphlogiſtic Method of treating it.

Bleed-

Bleeding pretty largely *pro ratione Ætatis et Inflammationis*, at the firſt Beginning of the Diſeaſe, and giving antiphlogiſtic Pectorals freely, and keeping the Body open by cooling gentle eccoprotic Catharticks, and Clyſters (not ſtrong or draſtic Purgatives), Fomentations and emollient repelling Cataplaſms to the Breaſt and Throat, were of the greateſt Service, and the moſt ſucceſsful.

The Month of May continued to be very dry, and alſo very warm, and very little Rain fell in all this Month, except a few ſmall Showers.

The loweſt the Thermometer was in the Morning was at 76, the higheſt at 80; the loweſt it was at Noon, was at 82, and the higheſt at Noon was at 85. The loweſt the Barometer, was at 29.8½, and the higheſt was at 29.9½.

Tho' the Month of May continued to be very dry and warm, yet a great Part of it continued to be pretty healthful, and the Seaſon did not begin to be more ſickly, till after the hot Weather had continued three or four Weeks, when inflammatory Diſeaſes began to increaſe and be more frequent; as Ophthalmies, Quinſeys, Peripneumonies, and Pleuriſies, though we had not a great many of theſe during this Month: We alſo had ſome Vertigoes, and a few Apoplexies, and Palſies, and but few; ſo that it might be called a tolerable healthful Seaſon.

On the thirtieth of this Month, I diſcontinued theſe Obſervations, and returned to England, and I now publiſh them for the Benefit of the Inhabitants of that Iſland, and ſincerely wiſh that they may be of Service to them and all theirs.

A TREA-

A

TREATISE

ON SUCH

DISEASES

AS ARE

The moſt frequent in, or are peculiar to, the WEST-INDIA ISLANDS, or the TORRID-ZONE, both Acute and Chronical, *viz.*

The Putrid Bilious or Yellow Fever, the Dry-Gripes, the Dyſentery, the Opiſthotonos and Tetany, the Rabies Canina, the Aphthoides Chronica, the Nyctalopia, and Hemeralopia, the Elephantiaſis, Vena Medinenſis or Guinea-Worm, the Arabian Leproſy, the Yaws, and the Impetigo or Ring-Worm.

BY

WILLIAM HILLARY, *M. D.*

THE

PREFACE.

AS I have in the preceding Obſervations taken notice of all the moſt material Changes of the Air and Weather, and of ſuch Alterations as happened in their concomitant Epidemical Diſeaſes: I ſhall in the following Eſſays, endeavour carefully to obſerve, and ſtrictly to trace out, and follow Nature, both in the Deſcriptions of the Diſeaſes, and their Symptoms, herein treated of, as alſo in their Methods of Cure, as I poſſibly can: As that is, not only the Method which the great Father and Prince of Phyſicians Hippocrates *adviſed and followed, but has been recommended by the greateſt Men; the great Lord* Verulam *ſays,* Obſervandum eſt quid Natura facit aut ferat. *And the no leſs Profeſſ.* Boerhaave *both obſerved, followed and recommended the ſame; and as it is the only true Baſis, on which all true Knowledge, both in Phyſic and Philoſophy ought and can be founded.*

As

As moſt of the Diſeaſes here treated of are either ſuch as are indigenous and endemial in the Weſt-India Iſlands, or peculiar to the Torrid Zone; and are ſeldom or never ſeen in the colder European Nations; it is probable that ſome of them at leaſt, were not ſo well known to many of the ancient Greek Phyſicians, *as they have not ſo accurately deſcribed them as they have moſt of the other Diſeaſes which they more frequently ſaw; neither have the* Arabian Phyſicians *ſo methodically and accurately deſcribed ſome of them, as may be deſired, tho' they were more frequent in their Countries; and are Diſeaſes, which were ſtill much leſs known to the more modern Phyſicians in Europe. And ſome of them, I think, are new, and have not been deſcribed before: Wherefore I hope that an Account, and accurate Deſcription of thoſe Diſeaſes, will not be unacceptable to the Public, at leaſt to the Curious. And as I have had frequent Opportunities both of ſeeing, obſerving, and treating them, I have endeavoured carefully to obſerve, examine, and deſcribe them, and all their material Symptoms and Appearances, as near to the manner in which they come on, and ſucceed each other, as I poſſibly could, both that they may be known when ſeen, by thoſe who have not ſeen them before, as well as by thoſe who have.*

I have alſo endeavoured to enquire into the Nature and Cauſes of theſe Diſeaſes, and how they act, ſo as to produce thoſe Symptoms

and

and Effects, which uſually attend them, as agreeably to the Laws of Motion and of the Animal Oeconomy, as I poſſibly could: and from thence I have endeavoured to deduce and diſcover their true Indications, and proper Intentions of Cure, more eſpecially in thoſe Diſeaſes which are new, and have not been deſcribed before.

I have alſo endeavoured to purſue the ſame Methods in thoſe Diſeaſes, which have been either too imperfectly deſcribed by the Greeks, *or too inaccurately and immethodically by the* Arabians, *tho' they are Diſeaſes which were much more frequent in their hot Countries, than they probably were in* Greece; *in order to obtain as juſt a Knowledge of them, and their Intentions of Cure, as I poſſibly could; and then examined thoſe Methods, and ſuch Medicines as they uſed and recommended, and compared them with thoſe which the modern Improvements in Chemiſtry and the Materia Medica have produced, and have choſen ſuch as ſeemed to be the moſt likely to anſwer thoſe Intentions and Cure in the moſt efficacious Manner, in order to form and obtain as rational and judicious a Practice in them as I could. Which Methods I have now experienced, and endeavoured to improve for ſome Years, and ſuch as I have found to be the moſt ſucceſsful, I now take the Liberty of recommending them to my Brethren, and others, that they may either uſe or farther improve them, if they can:*

can: Wherefore I have here given more Formulæ *or* Preſcriptions, *in this ſecond Part, than I did in the Obſervations on the Air and Epidemic Diſeaſes in the firſt Part; both becauſe ſome of the Diſeaſes are new, as alſo are the Methods of treating ſome of the others, and becauſe I principally write and publiſh theſe for the Good of the Inhabitants, and the Benefit of thoſe who commonly practiſe in the Weſt-India Iſlands, many of whom have too ſmall a Share of Learning; for whoſe ſakes I have often been more explicit and full in the Theory of theſe Diſeaſes, as well in tracing out their Cauſes, and their manner of acting, as in drawing their Intentions of Cure and deſcribing the Methods of curing them; which would not have been neceſſary if I had written only for the Learned: And I hope they will be of ſome Service, at leaſt to the younger Phyſicians, and the Practitioners in thoſe Iſlands, and flatter myſelf that they will be received as the honeſt Endeavours of a ſincere Well-wiſher, both to his Profeſſion, and to them and all Mankind in general.*

A

TREATISE

ON SUCH

DISEASES

AS ARE

The moſt frequent in, or are peculiar to, the WEST-INDIA ISLANDS, or the TORRID-ZONE, both Acute and Chronical.

Of the PUTRID BILIOUS FEVER, *commonly called the* YELLOW FEVER.

THIS Diſeaſe is moſt commonly known by the Name of the Yellow Fever, from a Yellowneſs like the Jaundice which diffuſes itſelf all over the Body of the Sick, towards the latter End of the Diſeaſe. The French call it *La Maladie de Siam*, from its being frequent in the Kingdom of *Siam* in the Eaſt-Indies, which is ſituated between the Tropicks, near the ſame Latitude with the Weſt-India Iſlands: They alſo call it *La Fievre Matelotte*, becauſe Strangers and Sea-faring People are the moſt obnoxious to it: And the Spaniards call it *Vomito Preto*, or the Black Vomiting, from one

one of its dangerous Symptoms. I ſhall not enter into any Diſpute about the Name of this Fever, or the Propriety or Impropriety of calling it a Putrid Bilious Fever, (tho' ſome have objected to this *) as that is only a Diſpute about Words. But as we have no Account of this Diſeaſe in the Ancients, not even in the *Arabian Writers*, who lived and practiſed in the hot Climate; we muſt give it ſome Name, and I think this is the moſt ſuitable to the Nature and Symptoms of the Diſeaſe.

From the beſt and moſt authentic Accounts that I can obtain, as alſo from the Nature and Symptoms of the Diſeaſe, it appears to be a Fever that is indigenous to the Weſt-India Iſlands, and the Continent of America which is ſituated between, or near to the Tropics, and moſt probably to all other Countries within the Torrid Zone. But I cannot conceive what were the Motives, which induced a late ingenious Author † to think that this Fever was firſt brought from Paleſtine to Marſeilles, and from thence to Martinique, and ſo to Barbadoes, about thirty-ſeven Years ſince. A better Enquiry would have informed him, that this Fever had frequently appeared in this and the other Weſt-India Iſlands, many Years before: for ſeveral judicious Practitioners, who were then and now are living here, whoſe Buſineſs was viſiting the Sick, the

* Dr. Warren on this Fever. † Idem ibid.

the greateſt Part of their Life-time, ſome of them almoſt eighty Years of Age, who remember to have ſeen this Fever frequently in this Iſland, not only many Years before that time, but many Years before that learned Gentleman came to it.

The ſame Author ſuppoſes this Fever to be of the peſtilential kind; but his Reaſons for it are chiefly founded on the ſame Suppoſition, that it proceeded from the Plague then raging at Marſeilles. But a more ſtrict Inquiry into the Nature of its Symptoms, and a better Examination of the State of the Blood of thoſe who labour under it, would have ſufficiently ſhewed him that it was a very different Fever: to which I may add, its not ſpreading and infecting others, as the Plague always does; for this Fever very rarely or never is infectious or contagious to others, not even to thoſe who attend the Sick, except a chance Time, when it is in its moſt putrid malignant State at the latter End of the Diſeaſe; or ſoon after the Death of the Patient, when the Seaſon is very hot, and this Fever is accompanied with the Symptoms of ſome other malignant Fever which is then epidemical and contagious, as happened once at *Antigua*, and once or twice in this Iſland; and the ſame may probably have happened in ſome other Places: but I never could obſerve any one Inſtance, where I could ſay that one Perſon was infected by, or received this Fever from, another Perſon who had it; neither

have I even ſeen two People ſick in this Fever in the ſame Houſe at or near the ſame Time, unleſs they were brought into the ſame Houſe when they had the Fever upon them before they came. From whence we may conclude, that it has nothing of a contagious or peſtilential Nature in it: And that it is a very different Fever in all Reſpects, as it will more fully appear hereafter.

It is remarkable that this Fever moſt commonly ſeizes Strangers, eſpecially thoſe who come from a colder, or more temperate Climate, to this much warmer; and moſt readily thoſe who uſe vinous or ſpirituous Liquors too freely; and ſtill more readily thoſe who labour hard, or uſe too violent Exerciſe, and are at the ſame time expoſed to the Influence of the ſcorching Rays of the Sun in the Day-time, and ſoon after expoſe themſelves too ſuddenly to the cool Dews and damp Air of the Night, and eſpecially if they drink ſpirituous Liquors too freely at the ſame time: Hence the poor unthinking Sailors too frequently become a Prey to this too often fatal Diſeaſe.

It does not appear from the moſt accurate Obſervations of the Variations of the Weather, or any Difference of the Seaſons, which I have been able to make for ſeveral Years paſt, that this Fever is any way cauſed, or much influenced by them: For I have ſeen it at all Times, and in all Seaſons of the Year, in the cooleſt, as well as in the hotteſt time of

the Year: except that I have always obſerved that the Symptoms of this (as well as moſt other Fevers) are generally more acute, and the Fever uſually higher, in a very hot Seaſon, eſpecially if it was preceded by warm, moiſt Weather, than it uſually is when it is more cool.

This Fever moſt commonly ſeizes the Patient, at the firſt with a Faintneſs, then a Sickneſs at the Stomach, and moſtly with a Giddineſs in the Head, ſoon after with a ſmall Chillineſs and Horror, very rarely with a Rigor, which is ſoon followed by a violent Heat, and high Fever, attended with acute darting Pains in the Head and Back; *a Fluſhing in the Face, with an inflamed Redneſs and a burning Heat in the Eyes; great Anxiety and Oppreſſion about the Præcordia; theſe and the burning Heat and Pain in the Eyes, are* the pathognomic Symptoms of this Fever, eſpecially when accompanied with *Sickneſs at the Stomach, with violent Reachings, and bilious yellow Vomitings, and great Anxiety with frequent Sighing.* The Pulſe is generally now very quick, high, ſoft, and ſometimes throbbing, never hard; in ſome it is very quick, ſoft, low, and oppreſſed; a quick, full, and ſometimes a difficult Reſpiration: the Skin very hot, and ſometimes dry, tho' more frequently moiſt. Blood taken from the Patient, even at the firſt Beginning of the Diſeaſe, is often of an exceeding florid red Colour,

much rarefied and thin, and without the leaſt Appearance of Sizeneſs, and the Craſſamentum, when it has ſtood till it is cold, will ſcarce cohere, but fluctuates; the Serum is very yellow: moſt of the above-mentioned Symptoms continually increaſe, and are much aggravated; the Reaching and Vomiting become almoſt inceſſant, the Anxiety great, and Sighing frequent, great Reſtleſſneſs, continual Toſſing, no Eaſe in any Poſture, little or no Sleep, and that diſturbed, uneaſy, and without any Refreſhment to the Sick: And when they are fainting they turn yellow about the Face and Neck inſtead of turning pale, and as the Fainting goes off, they recover their natural Colour again. Theſe Symptoms generally continue to the third Day, tho' ſometimes not longer than the firſt or ſecond Day, in others to the end of the fourth Day; the firſt ſhews the quicker Diſſolution of the Blood, and greater Malignity of the Diſeaſe, the laſt the contrary, or the leſs Degree of it; which the improper Manner of treating the Diſeaſe ſometimes haſtens and increaſes, or the proper Method retards. This may be called the firſt Stadium of the Diſeaſe, and moſt commonly ends on the third Day.

Blood taken from the Sick on the ſecond or third Day, is much more diſſolved, the Serum more yellow, and the Craſſamentum florid, looſe, ſcarce cohering, but undulates like fizy Water when ſhaken, and ſometimes has

has dark blackiſh Spots on its Surface, ſhewing a ſtrong gangreneſcent Diatheſis.

About the third Day, the Pulſe, which was quick and full before, now generally ſinks greatly, and becomes very low, tho' ſometimes it remains very quick, yet in others it is not much quicker than when the Patient is in Health, but is always low; the Vomiting grows poraceous, and almoſt inceſſant, if not ſo before, and the Patient begins to be comatous, attended with interrupted Deliria's. The Thirſt in ſome great, in others not much; the Pulſe ſtill low and quick, attended with cold clammy Sweats, and ſometimes with Deliquia. The Eyes, which were inflamed and red before, and began to be of a more duſkiſh Colour, now turn yellow; this Yellowneſs alſo ſoon appears round the Mouth, Eyes, Temples, and Neck, and ſoon after diffuſes itſelf all over the Body. This total Yellowneſs is ſo far from being always an encouraging Prognoſtic, as Dr. *Town* ſays, that it moſt commonly, on the contrary, proves a mortal Symptom; as it, when it comes ſoon on, ſhews a greater Colliquation and Diſſolution of the Blood, and a gangreneſcent State of the Fluids. I grant that this yellow Suffuſion of Bile upon the Surface of the Body has, at a chance time, (tho' very ſeldom) proved critical; but then it did not come on till the eighth or ninth Day, nor appear till the Coma, and all the other

bad Symptoms began to abate, and as the Yellowneſs increaſes, they all decreaſe; but this very rarely happens. But this Yellowneſs is moſt commonly quite the reverſe, eſpecially when it comes ſoon on, and is not only ſymptomatical, as it ariſes from the colliquated, putrid, diſſolved and gangreneſcent State of the Blood; but it too often uſhers in all the laſt and moſt fatal Symptoms of the Diſeaſe, viz. a deep Coma, a low vermicular and intermitting Pulſe, great Hæmorrhages from various Parts of the Body, a Delirium, with a laborious and interrupted Reſpiration, great Anxiety, deep Sighing, great Reſtleſſneſs, a Subſultus Tendinum, great Coldneſs of the extreme Parts firſt and then all over the Body, a Faltering of the Speech, Tremors, Convulſions, and Death. So that from the firſt Appearance of this ſymptomatical Yellowneſs, we may ſay, the Patient is in the laſt Stage of the Diſeaſe, how ſoon ſoever it may come on; tho' in ſome it has not come on till the eighth or ninth Day, and then is uſually critical, but this very rarely happens.

It has alſo been obſerved, that in ſome ſanguine ſtrong Conſtitutions, when they have not been bled to a ſufficient Quantity in the firſt, ſecond, or third Days of the Diſeaſe, to reſtrain its Violence, the Pulſe has continued full, ſtrong, and rapid, but never hard, the the Face flushed, Eyes inflamed, the Tongue dry,

dry, with great Thirſt and Heat, till the ſecond or laſt Stage of the Fever is come on, when the Pulſe has ſuddenly ſunk, and Death has ſoon after enſued: Yet in others, who ſeemed to have plethorick Habits, the Tongue has been moiſt all along, tho' they have been delirious moſt of the time, and the Heat of their Skin, and the Strength and Quickneſs of their Pulſe has continued, after the firſt Stage of the Diſeaſe was over, pretty near to that of their natural State in Health, till within a few Hours of their Death; and when they have had a Coma on them, one who is not well acquainted with this Fever, would from their Pulſe, Heat, Breathing, and other Symptoms, have taken them to be in a natural Sleep. Others, when the Pulſe has begun to ſink, and the fatal Period ſeemed to be juſt approaching, to the great Surprize of all preſent, the Patient has recovered his Senſes, ſat up, and talked pretty chearfully for an Hour or two, and in the midſt of this ſeeming Security, has been ſuddenly ſeized with ſtrong Convulſions, and died immediately.

I mentioned Hæmorrhages before, for in the latter Stage of this Fever, the Blood is ſo attenuated and diſſolved, that we frequently ſee it flowing, not only out of the Noſe and Mouth, but from the Eyes, and even through the very Pores of the Skin; alſo great Quantities of black half-baked, or half-mortified Blood is frequently voided, both by Vomit-

ing and by Stool, with great Quantities of yellow and blackiſh putrid Bile by the ſame ways; and the Urine, which was before of a high ictericious Colour, is now almoſt black, and is frequently mixed with a conſiderable Quantity of half-diſſolved Blood. The Pulſe, which was much ſunk before, now becomes very low, unequal and intermitting; the Breathing difficult and laborious; and the Anxiety becomes inexpreſſible, and an Oppreſſion with a burning Heat about the Præcordia comes on, tho' the Extremities are cold, and often are covered with cold clammy Sweats; a conſtant Delirium, and then a total Loſs of Reaſon and the outward Senſes, with livid Spots in many Parts of the Body, eſpecially about the Præcordia, and ſometimes Gangrenes in other Parts of the Body, which are ſoon followed by Death.

And ſoon after Death the Body appears much fuller of livid large blackiſh mortified Spots, particularly about the Præcordia and Hypoconders, eſpecially the Right; which Parts ſeem even from the firſt Seizure, to be the principal Seat of this terrible Diſeaſe. And upon opening the Bodies of thoſe who die of it, we generally find the Gall-Bladder and Biliary Ducts turgid, and filled with a putrid blackiſh Bile; and the Liver, and Stomach, and adjoining Parts, full of livid blackiſh mortified Spots, and ſometimes Gangrenes,

grenes, in thoſe, as alſo in ſeveral other Parts of the Body. And the whole Corpſe ſoon putrefies after Death, and can but be kept a few Hours above Ground.

From an attentive Conſideration of all the Symptoms which attend this Diſeaſe, and a ſtrict Examination of the putrid State, and diſſolved gangreneſcent Condition in which we find the Blood of thoſe who labour under it; as well as the half-putrefied and mortified State in which the Body is found immediately after their Death: Whether this Fever proceeds from infectious Miaſmata, or it ariſes from the great Heat of the Air, and Water, and the Putrefaction of our Fluids, *&c.* from thence, and is thereby *indigenous* to thoſe Countries which are ſituated within the Torrid Zone; or whatever is its *procatarctic Cauſe*; it evidently appears from all the Symptoms which attend it, as well as from their putrid Effects, that a bilious putrefying Diatheſis, is actually introduced into the Blood and all the circulating Fluids of the Body, whereby not only the firſt and ſecond Concoctions, or the Chylification and Sanguification of the Blood are ſo diſturbed, altered and changed, that all the Humours, and particularly the Bile, are by the rapid Motion of the Blood and greatly increaſed Heat of the Body, ſo inquinated with a putrid bilious Acrimony, which in a little time ſo attenuates and diſſolves the Texture of the Blood,

Blood, that it runs off by the various excretory Paſſages, and the Pores, but alſo *Errores Loci Fluidorum* are produced, whence the Brain is affected, and all animal Functions ſo diſturbed and altered, and the Texture of the Blood is ſo diſſolved, that all the Humours of the Body are almoſt changed into a putreſcent lethiferous Ichor, (if not timely prevented) which muſt inevitably end in Death.

That the Bile has a great, if not much the greateſt Share in producing this Fever, and this putrid gangreneſcent State of the Blood, I think is too evident to be doubted; notwithſtanding what a late ingenious Author * has ſaid to the contrary: For it is well known, that the Bile will putrefy both much ſooner, and to a much higher Degree of Acrimony, than any other Humour in all the human Body, and alſo will diſſolve the Texture of the Blood much ſooner: And we not only obſerve that a great Quantity of deep yellow and almoſt black, putreſcent, acrid Bile, is conſtantly diſcharged both upwards and downwards, even from the firſt Beginning of this Diſeaſe; and the Suffuſion of it all over the Body afterwards, confirms the ſame; and we alſo find upon opening the Bodies of thoſe who die of it, that the Gall-bladder, and its Ducts, are always found turgid with a porraceous, blackiſh, putreſcent Bile; and we likewiſe obſerve, that the Hypochonders, eſpecially

* Dr. Warren on this Fever.

cially the Right, and the adjoining Præcordia, are the moſt affected throughout the whole time of the Diſeaſe, which is the Seat of the Liver and Gall-bladder; inſomuch, that the ſame Author ſays †, *it ſeems to be the Seat and Throne of this Diſeaſe.* And I have always obſerved, that the Sick cannot bear the leaſt Preſſure of one's Hand, upon the Parts where the Gall-bladder and biliary Ducts and the Liver are ſituated.

No doubt but when the Blood is once inquinated by this putreſcent bilious Humour, that the great Relaxation of the Solids, and the great Diminution of the Momentum of the Fluids, ſubſequent to and ariſing from thence, and which generally comes on in the third Day, or ſoon after, with the ſecond State of the Diſeaſe, does greatly contribute to produce the putreſcent Diatheſis, and increaſe that gangreneſcent Diſpoſition of the Fluids and Solids, which always attends the latter Stage of this Diſeaſe.

From all the above-mentioned Symptoms, and from the Nature, Diſpoſition, and State of the Humours, which are conſequential to them, we muſt endeavour to deduce our Indications and Intentions of Cure; ſince we have none of the Ancients to follow, or to direct us, nor yet to appeal to; as none of them has ever mentioned, or probably ever ſeen this Diſeaſe; neither have I ſeen any modern

† Idem ibid.

modern Author, except the above-quoted Author, from whom I muſt beg Leave to diſſent, becauſe I cannot think as he does; wherefore I drew up the following Intentions of Cure, which are,

Firſt, *To moderate the too great and rapid Motion of the Fluids, and abate the too great Heat and Violence of the Fever, in the two firſt Days of the Diſeaſe, as ſafely and as much as we can.*

2dly. *To evacuate and carry out of the Body, as much of that putrid Bile and thoſe putrid Humours, as expeditiouſly and as ſafely as we poſſibly can.*

And 3dly. *To put a Stop to the putreſcent Diſpoſition of the Fluids, and prevent the Gangrenes from coming on, by ſuitable Antiſcepticks.*

For it is obſerved, that moſt, if not all, who die of this Diſeaſe, generally have, and die of, Mortifications, either internally or externally, or both.

And as this Fever and moſt of its Symptoms, are generally great and violent, and the Pulſe very quick and full, the Heat of the Patient is moſt commonly very great; ſince Heat or πῦρ, Fire, is always collected in proportion to the Quantity of Matter, multiplied by its Quantity of Motion, or as the Momentum of the circulating Fluids is; and this being very great, conſequently the firſt Intention of Cure, viz. *To moderate the too great and rapid Motion of the*

the Fluids, and abate the Heat and Violence of the Fever, in the two firſt Days of the Diſeaſe, is indicated, and is abſolutely neceſſary: And as it is well known to Phyſicians, and may be demonſtrated by hydraulic Laws, that by leſſening the Quantity of the Blood, we diminiſh its Motion, and conſequently abate the Violence of the Heat and Fever: Wherefore Bleeding, in the Beginning of the firſt Stage of this Fever, either to a greater or leſs Quantity, accordingly as the following Symptoms and Circumſtances indicate, is always abſolutely neceſſary: And the Quantity to be taken away ſhould always be as the Age and Strength of the Patient, the Degree of the Plethora, and the greater or leſs elaſtic State of his Solids, the Fulneſs of his Pulſe, and the Violence of the Fever and its Symptoms. For which Reaſons, when I have been called in time (which is too ſeldom the Caſe) I generally order 12, 14, 16, 18, or 20 Ounces of Blood to be taken away, on the firſt or ſecond Day; but always as the above-mentioned Symptoms and Rules indicate and direct: And if the Patient's Pulſe riſes after the firſt Bleeding, or if the Fever continue to be ſtill high and the Pulſe full, (for it is never hard in this Fever) I repeat the Bleeding once, in the firſt or ſecond Day of the Diſeaſe, if the above-mentioned Symptoms indicate it; but Bleeding a third time is ſeldom or never required, neither is Bleeding on the third Day almoſt ever required; and when

when it is performed on that Day, it ought not to be adviſed without great Caution and Judgment; neither ſhould a Vein be opened after the third Day in this Fever, unleſs ſome very extraordinary Symptoms and Circumſtances require it, which very rarely or never happen: Becauſe the Pulſe generally ſinks to be low on that Day, or very ſoon after it, when Bleeding muſt be greatly prejudicial, as the Blood is then in a diſſolved State, and the Pulſe ſunk low, which it now muſt ſink lower, by diminiſhing the Momentum of the Fluids, and conſequently increaſe their gangreneſcent Diſpoſition, and ſo bring on a Mortification and Death. Theſe probably were the Reaſons why the before-mentioned Author * adviſed not to bleed at all in this Fever; but as the Pulſe is generally ſo exceeding quick and full, and the Heat and Violence of the Fever ſo great in the two or three firſt Days of it, it is abſolutely neceſſary to abate and moderate them, by taking ſome Blood away in thoſe Days, otherwiſe that violent Heat and rapid Motion of the Blood, ariſing from that putreſcent bilious Acrimony, ſo attenuates and diſſolves it, that it brings on more fatal Conſequences much ſooner, as I have more than once or twice obſerved; and I have always found that taking away a moderate, but ſufficient Quantity of Blood on the firſt or ſecond Days has rendered the Fever more moderate, and abated the putreſcent Diathe-

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* Dr. Warren on this Fever.

ſis afterwards: But as to the Quantity of Blood to be taken away in this Caſe, either the firſt or ſecond time, or on the firſt or ſecond Days, it is impoſſible to aſcertain it, ſince that muſt be different in different Patients; becauſe ſome Conſtitutions can better bear the Loſs of fifty Ounces of Blood, than others can the Loſs of eight or ten; therefore the only Rules that can be given, are thoſe laid down before.

After Bleeding, we come to the ſecond Intention of Cure; which is, *to evacuate and carry off as much of the bilious putrid Humours, as ſoon and as ſafely as* we *can.*

The great Irritation of the Stomach, by the putrid bilious Humours which conſtantly attend this Fever, with almoſt continual Reachings and violent Vomitings, ſeem to indicate giving an Emetic; but the Coats of the Stomach, I have always obſerved, are here ſo violently ſtimulated and irritated, and moſt commonly inflamed by the Acrimony of the putreſcent Bile, that any Emetic, even the moſt gentle, and mild, and ſmall Doſe, generally brings on ſuch an inceſſant Vomiting, that it continues in ſpite of all Remedies, till an Inflammation and Mortification of the Stomach comes on, which ſoon ends in Death; as I have too often obſerved, when called in after they have been given: Neither could I ever find that any Antiemeticks, Fomentations, or any other Methods, would very ſeldom

dom avail and prevent it. Wherefore I have always ſtrictly forbid giving any Emeticks whatever.

But as the carrying off thoſe putrid bilious Humours, before their putrid Acrimony is too much increaſed by the Heat of the Fever, or is carried into the Blood, is ſo abſolutely neceſſary; I uſually order the Patients to drink large Draughts of warm Water, to which I ſometimes add a little ſimple Oximel, or a little ſmall green Tea, in order to carry off thoſe putrid Humours; and they are moſt commonly very copiouſly diſcharged by this Means, and the Patient much relieved thereby, as I have often with Pleaſure obſerved. For here no additional Stimulus to the Coats of the Stomach, is neceſſary to excite Vomiting, that being already too great; and the warm Water, being a ſmooth Emollient, acts as a Fotus to the Stomach, and ſo contributes to prevent thoſe bad Conſequences beforementioned from coming on.

And after the Patient has by this Means vomited ſeven, eight, or nine times, and diſcharged a good deal of yellow and blackiſh bilious Matter, as they generally do, and the Stomach is very well cleanſed; in order to gain a Truce and ſome Reſpite from their Anxiety, and almoſt continual Reaching, Vomiting, and Sickneſs, which are not increaſed, but ſomewhat relieved by drinking the warm Water, I uſually give *Extract. Thebaic.*

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gr. i. *vel gr.* iſs, and order them to take nothing into their Stomachs for two Hours after it, that they may retain it; and it being in ſo ſmall a Compaſs, they ſcarce ever reject it: By this Method, the poor diſtreſſed Patient gets ſome Reſt and Reſpite, and all the Symptoms are generally conſiderably abated, the Reaching and Vomiting either totally ceaſe, or do but ſeldom return; ſo that other Medicines may be given and retained on the Stomach, which it could not retain before; ſuch as cooling acid Juleps, or other antiphlogiſtick and antiſeptick Medicines; but neither *Nitre*, nor any Preparations of it, will rarely either agree with or ſtay on their Stomachs, or if they or the common ſaline Draughts, though eſteemed Antiemeticks, do chance to ſtay with them, which they ſeldom do, yet as Attenuants they ought rather to be ranked among the *Ledentia* in this Diſeaſe, however uſeful they may be, and often are, in moſt inflammatory and ſome other Diſeaſes.

And if the Patient has not a Stool or two after drinking the warm Water and Vomiting, it is neceſſary to give a gentle purging Clyſter ſoon after the Vomiting, and before the Opiate begins to affect the Patient, to evacuate the Excrement, and as much of the putrid bilious Humours as we can: And after ſix or eight Hours Reſt and Reſpite, I order a gentle antiphlogiſtick and antiſeptick Purge to be given; in order to carry as much

more of thoſe putrid bilious Humours off as we poſſibly can. Or if the Patient has a Purging before, which ſometimes tho' very ſeldom happens, I order a gentle Doſe of toaſted Rhubarb to be given, and an antiſeptick Anodyne after it has operated, to abate and check the too much purging, but not to ſtop it; as I have always obſerved it to be of Service in this Caſe, provided that it is moderate and not too violent: And I obſerved that all thoſe who had this Purging, generally did well with it, if the Patient's Strength was but properly ſupported with ſuitable Nouriſhment, and proper antiſeptick Medicines; which laſt are always abſolutely neceſſary in this Fever.

And tho' Purging in many other Fevers, except the ſecond Fever of Small-pox, in the Pleuritis and Peripneumonia Notha, and in a few other Fevers, may be deemed bad Practice; yet in this Fever, as Nature indicated it, I have always found it of ſingular Service, and the Patient not only greatly relieved by it, but the Diſeaſe always rendered more moderate, and manageable afterwards: Wherefore whenever a painful burning Heat in the Hypochonders, or about the Præcordia, comes on, I generally give a little Manna and Tamarinds, which ſeldom or never fails to carry off a good deal of putrid bilious Matter, and that burning Pain which it cauſes, with it; wherefore I generally repeat this Purging,

ing, whenever that burning Pain returns and indicates it, and with all the Succeſs we can deſire.

I have obſerved before, p. 149, that this Fever greatly abates, the Pulſe ſinks very much and becomes low, and the Heat of the Body becomes moderate on the third Day; tho' the other bad Symptoms continue, and ſometimes grow worſe, and a Coma comes on, with a great Yellowneſs diffuſed all over the Skin, which with the before-mentioned Symptoms, p. 147, are the diſtinguiſhing Characteriſticks of this Diſeaſe. This extraordinary Change in the Fever, from being very hot and high, and the Pulſe very rapid and full, though ſoft, to become very ſmall and low, and the Patient's Skin which was burning hot before, to become little warmer than when in Health, and ſometimes colder, with a Coma and all the other bad Symptoms as above, at the ſame time, is ſuch a Change, as requires a very different Method of Treatment from what it did in the firſt two or three Days of the Diſeaſe.

For now every Symptom and Circumſtance evidently ſhew, that a Diſſolution of the Globules and Texture of the Blood, and a putreſcent, colliquative, gangreneſcent State of the Fluids, now haſten on apace, with all their fatal Symptoms. Hence the third and laſt Intention of Cure evidently appears, viz. *To put a Stop to the putreſcent Diatheſis of the*

Fluids, and prevent the Gangrenes from coming on.

In theſe Circumſtances it is abſolutely neceſſary, that the Vis Vitæ, and the Momentum of the circulating Fluids, be increaſed and kept up in a moderate briſk State; and the moſt effectual Antiſepticks given, to put a Stop to the putreſcent Diſpoſition of the Fluids, or Gangrenes will come on.

In theſe Circumſtances the *Cortex. Peruv.* may be thought to be the beſt, and moſt likely Medicine to ſucceed: I grant that its well known Efficacy, in preventing or putting a Stop to Mortifications, promiſes much; but the Misfortune is, that this Drug is ſo diſagreeable to moſt Palates, and the Stomachs of the Sick in this Diſeaſe are ſo much affected, and ſo weak and ſo ſubject to reject every thing, even the moſt pleaſant and innocent, that they can very rarely take it in any Shape, and ſtill much fewer can retain it when they have got it down; ſo that no Streſs or Dependance can be laid on it: And the only way that I could get a Patient to take and retain two Doſes of the Bark in this Caſe, was the Extract of it, with a Spoonful or two of Milk and Water, and even thus they could not retain a third Doſe of it; wherefore I ſoon laid aſide all future Attempts to give it, foreſeeing that it would be in vain, and that we ſhould thereby only loſe Time, not to be recovered,

recovered, and our Patients alſo, when we might probably ſave them by another Method; and I am told that ſeveral others have tried to give the Bark in this Caſe, but with no better Succeſs.

The *Radix Serpentaria Virginiana*, is the next beſt *Antiſeptick*, whoſe extraordinary Effects in ſtopping the Progreſs of Gangrenes, has been known for many Years; wherefore I tried it mixed with ſome others in the following Manner, and with much better Succeſs than I could hope for, or durſt expect: For I found that a light Infuſion of this Root, not only ſat eaſily on their Stomachs, but it moderately raiſed the Pulſe and Fever, which were now ſunk too low, and kept them in an equal moderate State, if prudently given, which is a thing of the greateſt Importance at this time of the Fever, as on that chiefly depends the Recovery of the Patient, therefore ſhould be diligently attended to by the attending Phyſician; and as ſoon as ever he perceives that the Pulſe begins to abate and ſink lower, either on the third Day, or ſooner, he muſt immediately begin to give the antiſeptick and warmer Medicines, to ſupport the Vis Vitæ. I have found the following Form both the moſt agreeable to their weak Stomach, and the moſt powerful Antiſeptick, and indeed the moſt ſucceſsful Medicine.

℞ *Rad. Serpent. Virg.* ʒij. *Croci Angl.* ʒſs. *m. et infund. vaſe clauſo in Aq. Bul. q. ſ. per Horam unam ut Col* ʒvi. *adde Aq. Menthæ Simp.* ʒij. *Vini Maderienſ.* ʒiv. *Syr. Croci. vel Syr. e Mecon.* ʒi. *Elix. Vitrioli Acid. gut. q. ſ. ad gratam acidior. Saporem; m. exhibe Cochl. duo vel tria ſingulis horis vel bihoris, vel ſæpius pro re nata.*

This very rarely fails to ſit light and eaſily on their Stomachs, even when the ſaline antiemetic Mixtures will not; and often when every thing elſe is rejected. By the Uſe of this and proper Nouriſhment, taken in ſmall Quantities, and often, (for when it is given in larger Quantities, the Stomach too often rejects it, and the Patients ſink for want of Support;) and their Food or Whey ſhould now be made a little ſtronger of the Wine than before, or than uſual in other Fevers: By this Method the Pulſe is raiſed, and uſually kept up, and the Fever rendered moderate, and the Coma and other bad Symptoms greatly abated, and the Patient uſually goes on well. But if after taking this a little while, we find that the Pulſe does not riſe, and the Heat become equal all over the Body, and moderate; but on the contrary, a Coldneſs of the extreme Parts comes on, and increaſes, theſe Medicines muſt be made more warming, either by increaſing the Quantity of the *Rad. Serpent.* and Saffron, or by adding *Vinum Croceum,*

ceum, or *Confec. Cardiac.* or ſome ſuch like Medicines, till the Pulſe is raiſed, and the Heat equally expanded all over the Body; and then the Fever may be kept in a moderate State, by giving the before-mentioned antiſeptic Julep, or ſuch like Medicine: But not by the Uſe of *volatile alkaline Salts, or Spirits, as Sal. et Spir. C. C. Salis Ammoniac. Vol. Spir. Vol. Aromat. &c.* which diſſolve and increaſe the putreſcent State of the animal Fluids, as is well known both by Obſervation and Experiments, not made on Pieces of dead Fleſh, or dead ſtagnating animal Fluids; but by giving theſe alkaline volatile Salts and Spirits to the Living, which when they are taken into and mixed with the circulating Blood, do greatly attenuate and diſſolve it, and with the Heat of the Body, do bring on a putreſcent Diatheſis, and a putrid Colliquation of the Fluids, and conſequently muſt be greatly prejudicial in this Fever, which ariſes from a putreſcent bilious Acrimony, and wherein the Fluids are already really in a diſſolved putrid gangreneſcent State: Whereas the *Rad. Serpent. Crocus, & Elix. Vitrioli*, are very powerful Antiſepticks, and prevent the Diſſolution and Putrefaction of the Blood; and conſequently prevent or ſtop the Hæmorrhages alſo, which uſually come on in this ſecond State of the Diſeaſe.

It may be expected that the low Pulſe, Coma, Delirium, and the Coldneſs of the ex-

treme Parts, with the Tremors and convulsive Spaſms, &c. ſhould induce me to think that Veſicatories are indicated, and that I ſhould both uſe and adviſe them. I allow that they ſeem at the firſt View to be indicated, but a further Enquiry into the Cauſe and Nature of theſe Symptoms, and a due Conſideration of the diſſolved colliquative State which the Fluids are in, in this Fever; and an Examination into the Effects of the alkaline Salts of the Cantharides, when carried into our Blood, will clearly demonſtrate and ſufficiently convince us of the contrary: For this Coma, low Pulſe, Coldneſs of the extreme Parts, Delirium, Tremors, and the other bad Symptoms attending this Fever, do not proceed from a Lentor and Viſcidity of the circulating Fluids, as in ſome other Fevers, as the ſlow nervous Fever, and ſome others; but from a Diſſolution of the red Globules of the Blood, and their being carried into ſuch ſmall Veſſels as do not naturally admit them, whence an *Error loci fluidorum in Cerebro, &c.* is produced, and a due Secretion of the nervous and other fine Fluids, or animal Spirits in the Brain, is obſtructed or hindered, and a diminiſhed Momentum of the Blood, the Conſequence of the former, at the ſame time: The Application of Veſicatories muſt increaſe all theſe, and render very bad, much worſe. But in other Fevers, where theſe Symptoms ariſe from a Lentor and Viſcidity of

of the Fluids, which retard and hinder their free Circulation, and due Secretion; Bliſters being applied, the Salts of the Cantharides paſs into the circulating Fluids, as the Stranguries and increaſed Motion of the Blood demonſtrate, and attenuate, and diſſolve that Lentor and Viſcidity, and ſo remove the Cauſe of thoſe Symptoms, and produce almoſt ſurprizing good Effects, as we often ſee when they are judiciouſly applied, in ſuch Caſes. For the ſame Reaſons, the Application of Veſicatories in this Fever, muſt diſſolve the Blood more, which was in a diſſolved putrid State before, and render the Diſeaſe and all its Symptoms worſe.

The Truth of this is confirmed by Obſervation and Experience; but ſuch is the unreaſonable Fondneſs of Bliſters, in this Iſland, and in ſome other Countries alſo, almoſt in every Caſe where Pain and a Fever ſeize, that they are too often applied even in Dyſenteries, and in the Beginning of inflammatory Fevers, and much too often in this Fever, even in the laſt State of it, to the great Prejudice of their Patients: There are ſome few who practiſe there who know better, but in general from the want of reading ſuch Authors as would inform them better, they ignorantly follow the Practice of their Fathers and Maſters, who read very little; and themſelves read leſs, and follow Cuſtom, which has rendered the Uſe of Bliſtering almoſt

moſt ſacred, and the Fear of Reproach for not uſing them almoſt unavoidable, if the Practitioners have not Fortitude and Judgment ſufficient to oppoſe this their unwarrantable and pernicious Uſe.

This has but too often given me an Opportunity of ſeeing their bad Effects, eſpecially in this Fever; where I have obſerved, that the Coma, Tremors, Subſultus Tendinum, the Coldneſs of the extreme Parts, and the low Pulſe, (tho' this ſometimes has been rendered a little quicker, but not more full) have not only not been relieved by their Application, but have been increaſed thereby, and the Hæmorrhage, which uſually attends this Fever, has been haſtened on, or if come on before, it has been increaſed by their Application: And I have ſeen a Veſicatory, which I ordered to be taken off, as I uſually do as ſoon as I come in this Fever, that the Part where it laid was turned black and perfectly ſphacelated, and if the Spine and Ends of the Ribs had not hindered, a large ſquare Paſſage into the Cavity of the Thorax would have been opened, if the Patient had lived a few Hours after it, but he died two Hours after I came. And the Reflection, that I have never ordered any Viſicatories to be applied in this Fever, and have always ſtrictly forbidden their Application in it, I muſt ſay, gives me great Satisfaction.

But

But let us return to that Method of treating this Diſeaſe, which not only ſeems to be the moſt rational, but has been found to be the moſt ſucceſsful; tho' it may be almoſt of as much Service, to remark the *Ledentia*, as to mention the *Adjuvantia*. As the Diſeaſe advances, the putreſcent State of the Fluids increaſes, if not prevented by the Uſe of antiſeptic Medicines, and obſerving carefully to keep the Fever in a moderate State, and that it neither riſe too high, as it often does in the two or three firſt Days of the Diſeaſe, nor on the contrary ſink too low, as it frequently is very ſubject to be, in the ſecond State of the Diſeaſe, and in which there is the greateſt Danger: wherefore, whenever the Fever begins to ſink too low, we muſt endeavour to keep it up in a moderate State; by giving ſomething of the Nature of the before-mentioned antiſeptic Julep, which may be made more warming when neceſſary. And if the Anxiety, with the burning Pain and a Tenſeneſs of the Præcordia and Hypochonder return, either alone, or with the Coma, or a Delirium accompanying it, as is too often the Caſe, and always ariſes from an Increaſe or Collection of thoſe putrid bilious Humours, they muſt be carried off by repeating the antiſeptic Purge, as before; and the following Form is what I have always found to agree the beſt with moſt Patients, and ſeldom fails to remove theſe bad Symptoms.

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℞ *Mannæ Calab.* ℥iſs. *vel* ℥ii. *Tamerind. Cond.* ℥i. *Tart. Vitriolat. gr.* x. *M. Solv. in Sero Lactis Vino Maderienſ. per* ℥vi. *et Cola, Adde Tinct. Senæ,* ℥ſs. *Miſce, Dividet. in tres vel quatuor Partes, de quibus capiat Æger unam omni hora, donec incipiat purgare.*

This may be made ſtronger or weaker, as the Strength of the Sick requires; and it ſeldom fails to carry off a Quantity of yellow and blackiſh putrid bilious Matter, by which the Patient is much relieved, and the above-mentioned bad Symptoms are either much abated, or totally removed.

And I moſt commonly find it neceſſary to repeat this Purging every ſecond or third Day, for two or three times; and ſometimes, when the Symptoms are very bad, and have not much abated upon taking the firſt and ſecond Purge, and the Patient has not been treated in the Method before deſcribed, or I have not been called in, till late in the Diſeaſe, I have found it neceſſary to repeat the gentle Purging every Day, for four or five Days ſucceſſively, and with the deſired Succeſs too. But when I have been called in at the Beginning of the Diſeaſe, and treated the Patient in the Method before deſcribed, the Repetition of the Purging, is very ſeldom required more than twice or three times at moſt, in the whole Courſe of the Diſeaſe; eſpecially if the antiſeptic Medicines have been ſufficiently taken in the Intervals between

tween the Purging during the whole time of the ſecond State of the Diſeaſe; this Method rarely fails to ſucceed.

This Method has been, and may probably be thought by ſome others, too ſimple and eaſy, to conquer ſo violent and formidable a Diſeaſe: What! only bleed once or twice, and give a little warm Water, and two or three ſimple Purges, and this ſimple Julep, to ſubdue ſuch a terrible Diſeaſe! without any fine Boluſes, cordial Volatiles, and Veſicatories! But I muſt tell ſuch Perſons, that the more ſimple the Method is, if it be but judiciouſly and fitly adapted to the Nature and Cauſe of the Diſeaſe, it is ſo much the better, becauſe, *Contraria contrariis medentur.* And I flatter myſelf that the Learned and Judicious, will think ſo with me, eſpecially when they duly conſider, that the firſt and principal Seat of this Diſeaſe, is in the Hypochonders, eſpecially the Right, where the Liver and biliary Ducts are ſeated; and that the Bile, of all the Humours in the Body, does the moſt readily putreſce, and that to the higheſt Degree of Acrimony; and that this putrid acrimonious Bile is, at leaſt ſome Part of it, carried into the Blood; where its putreſcent Acrimony is greatly increaſed, by the great Heat of the Fever; and as the Bile is a liquid animal Soap, whoſe Property is to diſſolve all ſuch Bodies as are ſoluble by it, eſpecially the animal Fluids, and this diſ-

ſolving

ſolving Property being now greatly heightened and increaſed by its putrid Acrimony, more readily diſſolves the red Globules of the Blood, if not thoſe of the Serum and the finer Fluids alſo: And the Blood being thus diſſolved; and that Diſſolution being ſtill heightened and increaſed by the Heat of the Air, and the Fever, the whole Maſs of the Cruor is ſoon brought into a putrid, colliquative, gangreneſcent State, and the diſſolved red Globules are carried into ſuch ſmall ſerous, lymphatic, or ſtill ſmaller Veſſels, as do not naturally admit them, whence the Brain is affected, and the Coma, Tremors, Convulſions, and all the other Symptoms attending this Diſeaſe are produced, as alſo the Hæmorrhages, and the Blood flowing thro' all or moſt of the excretory Ducts, from its being ſo diſſolved; alſo a deep Yellowneſs ſuffuſed all over the Body, with many livid Spots, and Mortifications in various Parts of it; all which ariſe from the putreſcent Bile, and are produced in this manner.

This being the Cauſe, and this the Manner of producing this Fever, and all its Symptoms; a juſt Method of reaſoning from them makes it evidently appear, that this Method of moderate Bleeding and giving cooling Acids, in the two or three firſt Days of the Fever, to prevent its being too violent, as it often is, yet being careful not to bleed too much, leſt it ſink the Patient and his Pulſe

too

too much after in the ſecond State of it; and evacuating and carrying off as much of the putrid bilious Humors, both by the warm Water at the firſt, and by purging after; and then giving the beſt antiſeptic Medicines that the Patients can take, in a liberal manner, as before-mentioned, to prevent the Hæmorrhages and Gangrenes from coming on; not only appeared to be the moſt rational, and the moſt judicious, but I found this Method to be much more ſucceſsful, than more pompous Medicines, or the Methods generally uſed.

For as I found that all the Methods of treating this Fever, which had been uſed both in this, and the other Iſlands, were very uncertain, and too often unſucceſsful; it induced me carefully to obſerve, and attentively to enquire into the Cauſe and Nature of this Fever, and all its Symptoms, and the above Method of Reaſoning firſt dictated to me this Method of treating it, not long after I came here, and induced me to try it, the firſt Opportunity I ſhould have, as it appeared to be more rational than any of the others. And an Opportunity ſoon offered, which I ſhall beg the Reader's Patience, to relate, as it proved ſo ſucceſsful.

A young Man about twenty-four Years of Age, Surgeon to a Guinea Ship, was brought into a Houſe where I was viſiting a Patient; he was of a ſanguine, robuſt Conſtitution,

and

and a Lover of ſpirituous Liquors, and had been drunk three Days and Nights ſucceſſively, and in that Condition had run ſeveral Races on the hot Sea-ſhore, near Noon, with the Sailors, in the Heat of the Sun, and to compleat his Folly, laid the laſt Night after that Exerciſe, in the open Air under a Tamerind-Tree all the Night, where he was ſeized in the Morning with all the Symptoms of this Fever, in the moſt violent manner that I have ever ſeen any one; in this Condition he was brought to the Houſe where I was: His Reaching and Vomiting were ſo inceſſant, that he could not get Time to ſay Yes, or No, to the Queſtions which I aſked, without waiting ſome time for it, each time; his Eyes were red and inflamed, attended with a burning Heat, as uſual in the Beginning of this Fever, and he had all the other Symptoms which attend the firſt Attack of this Fever, in the moſt violent manner, which I need not repeat. I ordered ℥xvi. of Blood to be taken from him, which was very florid, thin, and much diſſolved, and then directed him to drink warm Water freely, and to vomit eight or ten times; and after that to take *Extract. Thebaic. gr.* jſs. and take nothing for two Hours after it; but I being gone, and he finding that he vomited with more Eaſe, leſs Sickneſs and Reaching, with the warm Water, than he did before, and being much alarmed at his having this Fever,

he

he drank three Gallons of the Water, and brought up great Quantities of yellow and blackiſh bilious Matter with it, and waſhed his Stomach effectually. He then took the *Extr. Thebaic.* and ſlept three or four Hours after it; and the Vomiting ceaſed: he took ſome Panada, and four Hours after that, the Purge of Manna and Tamerinds, *&c.* which gave him eight Stools, and carried a good deal more of the putrid bilious Matter off downwards; and got ſome Reſt after it: He then took of an antiſeptick Julep often, and light Nouriſhment a little acid, at the Intervals; and repeated the Purge on the third Day, as directed. I being called out of the Town, I did not ſee him till the fourth Morning after; he ſaid, that he had followed my Directions, and I found him free from the Fever and all its Symptoms, but weak and low, and his Skin a little yellow, but much leſs ſo than uſual, unleſs when the bilious Matter is thus carried off. I ordered him to take *Elix. Vitrioli Acid. Gut.* lx. three or four times a Day for a few Days, in an Infuſion of Mint Leaves with a little Snake-root, made as Tea, which he did; and ſoon recovered perfectly well, in ſeven or eight Days time.

This Patient being ſeized in ſo violent a manner, and recovering in ſo ſhort a time, and ſo near to the Rule which the elegant *Celſus* recommends, *Citò, tutò, et jucundè*, not only confirmed the above manner of Rea-

ſoning on the Cauſe and Nature of this Diſeaſe to be right, but made me determine to follow the ſame Method as near as I poſſibly could ever ſince, and I muſt add, with the ſame good Succeſs alſo, when I am called ſo early on in the Diſeaſe that I can ſtrictly purſue it: which is too ſeldom the Caſe; for in general the Phyſician is not called in till the fourth or fifth Day, or after, when the putrid acrid bilious Matter is a great Part of it carried into the Blood, which it has ſo diſſolved and brought its whole Maſs into a colliquated, putrid, gangreneſcent State, that the beſt of Methods, and the moſt efficacious Medicines, however judiciouſly timed and applied, are precarious and uncertain; or ſometimes it is ſo far advanced, that the ableſt Phyſician can do no more than tell the Relations of the Sick, that it is too late, and that they can live but a few Hours: For I know no Diſeaſe in which the Recovery of the Patient, ſo much depends upon the right or wrong Method of treating it, at the very firſt Attack or Beginning of the Diſeaſe, as this Fever does: For by thus diſcharging and carrying the putrid, acrimonious, bilious Matter, out of the Body, before much of it is carried into the Blood, not only moſt of the bad Symptoms which attend the ſecond State of the Fever are prevented from coming, but the Hæmorrhages, and the Yellowneſs of the Skin, *&c.* alſo, and the Fever ſoon taken off too; for I

have never ſeen any Hæmorrhage come on, and but little Yellowneſs, or in ſome none, when they were thus treated.

And when the laſt Stage of the Fever is come on before we are called in, provided that it is not at the very latter End of it, I have always found that this Method of gentle Purging, whenever the before-mentioned Symptoms indicate it, and a liberal Uſe of the antiſeptic Medicines in the Intervals, has been ſo ſucceſsful, that I have ſeen but two Patients that have died in this Fever during the eight Years paſt, in which I treated it in this manner; and one of them was ſo weak that he could not take a Spoonful of any thing, and ſo near his End, that he died about two Hours after without taking any Medicine; and the other killed himſelf by drinking a Gallon of cold Water in leſs than three Hours time, (after taking half an Ounce of Manna in the Morning) which ſtruck ſuch a Coldneſs into his whole Body that he died; tho' I have viſited ſeveral every Year, and in ſome Years a great many: therefore I take the Liberty of recommending this Method to others, and wiſh it to be as ſucceſsful to all.

I have ſaid little of the dietetic Part of Cure in this Diſeaſe, tho' it is neceſſary to ſay ſomething, eſpecially as their Stomachs are generally ſo very weak, and ſo much irritated by the acrid Bile, that they almoſt reject every thing, and can but often retain very little. It

may be ſaid, that their Diet muſt be thin, light, and little; but theſe Qualities alone are not ſufficient in this Diſeaſe, for it muſt be made as pleaſant and palatable as poſſible, in the three firſt Days of it; and as much antiſeptic as poſſible, to be made alſo agreeable, or otherwiſe they will neither be able to take or retain it. As, ℞ *Panis bene fermentati leviter cocti* ℥iv. *Coq. in Aq. pur. per horam, tum tere diu, dein preme per linteum denſiſſimum ut ſit Liquoris ſic parati* lbiſs. *cui immiſce Limonii maturi talcolatim ſciſſi* ℥i. *Nucis Moſcat. in Polinem triti* ʒi. *Servetur uſui*; *Sumat Æger omni bihori* ℥ii. *vel* ℥iii. *tempore uſus admiſcendo Vini Maderienſis* ¼ *et Sacchari quantum placet Palato Ægri.*

Or Pearl Barley may be boiled, and mixed in the ſame manner; alſo Madeira, or Rheniſh Wine-whey, and given often, and in ſmall Quantities, during the two or three firſt Days of the Fever. But after the third Day, when the Pulſe begins to ſink, and the Fever is too low, it is abſolutely neceſſary that both the Food and Drink ſhould be made more antiſeptic, and more generous and warming by increaſing the Quantity of the Wine in the Panada, and the Whey, eſpecially if the Patient's Pulſe and the Fever are too low; and if he has been accuſtomed to drink Wine pretty freely; or if the Fever be very low, and the Patient be faint, I ſometimes order him a Glaſs of old Hock, or old Madeira Wine, alone, or ſometimes mixed with a little Water;

ter; and I find them to be much better Cordials, than the hot ſpirituous compound Waters of the Shops are, in this Fever; and ſometimes I order a Beverage of Water, Lemon-juice, Sugar, and Madeira Wine, of which they drink a little and often, to aſſiſt the antiſeptic Medicines to raiſe the Pulſe, and keep the Fever in a moderate State.

And we muſt now carefully avoid giving any thing, either as Nouriſhment or in Medicine, that is of a ſeptic Nature, or that has the leaſt Tendency to putreſce; but on the contrary both Diet and Medicines ſhould be as much of the antiſeptick Nature as they can be made, ſo as to make them ſuitable in all other Reſpects; and that not only in this Caſe, but in all other Diſeaſes the Phyſician ought to take care that the Diet of the Sick be of the ſame Diſpoſition, and have the ſame Tendency, as the Medicines which he preſcribes for them have; for if they are of contrary Natures, and have oppoſite Effects, they will do little Service, and but ſeldom be attended with Succeſs, how good and efficacious ſoever the Medicines may be; ſince the Quantity of the firſt taken into the Body, and mixed with our circulating Fluids, in all Caſes ſo far exceeds the Quantity of the laſt, that if they are of oppoſite and contrary Natures, they muſt at beſt only deſtroy each other, and conſequently the Medicines can but have little Effect. This, I think, is a

material thing, which I think is but too much neglected in Practice, at leaſt by ſome, wherefore I take the liberty to mention it here.

Of the DRY GRIPES, *or* DRY BELLY-ACHE.

THIS Colic is moſt commonly called the Dry-gripes, and dry Belly-ache, and is a moſt painful Diſeaſe, which frequently ſeizes the Inhabitants of the Weſt-India Iſlands, and the Continent of America, and eſpecially the Strangers who come to reſide there; and ſometimes, though very rarely, ſome of the Inhabitants in England, and ſome other Parts of Europe: For I have ſeen ſeveral Patients in this Diſeaſe, when I reſided at Bath, who never had been out of England, as alſo did Dr. *Sydenham* long before. I think that *Riverius* is the firſt that mentions it, and calls it Colica Pictonum, the Colic of Poictiers, a Province in France, where it was firſt taken notice of.

Thoſe who have thin dry Conſtitutions, and are much emaciated by exceſſive Perſpiration and Sweating, or labour under great Anxiety and Affliction of Mind, or are immoderate Drinkers of ſpirituous Liquors, eſpecially ſuch as are fiery and new; or thoſe who are very irregular in the Uſe of the ſix Non-naturals, and eſpecially thoſe who live in America, and the Weſt-India Iſlands, are

are the moſt ſubject to this cruel Diſeaſe; to which Countries it ſeems to be endemial.

It generally ſeizes the Patient with an acute Pain at the Pit of the Stomach, which extends itſelf down with griping Pains to the Bowels, which are ſoon after much diſtended with Wind, with frequent Reachings to vomit, which ſometimes bring up ſmall Quantities of Bile and Phlegm. An obſtinate Coſtiveneſs, yet ſometimes attended with a Teneſmus, and the Bowels ſeem to the Patient as if they were drawn up towards the Back, at other times they are drawn into hard Lumps, or hard Rolls, which are plainly perceptible to the Hand on the Belly, by ſtrong convulſive Spaſms: And ſometimes the Coats of the Inteſtines ſeem to be contracted and drawn up from the Anus, and down from the Pilorus, towards the Part firſt and moſt affected near the Navel, as to the Center of their Miſery: The Fæces, when they are diſcharged afterwards, are in little hard dry Lumps like Bullets; the Belly uſually continues moſt obſtinately coſtive, and the Patient diſcharges but little Urine, and that often with Pain and much Difficulty. The Pulſe is generally low, though often a little quicker from the acute Pain, but no Fever, nor any Symptoms of an Inflammation of the Parts affected, either perceptible by the Pulſe, or any other Symptoms; though one Year I ſaw two or three Patients in this Diſeaſe, who had ſome inflammatory

Symptoms, and their Blood was a little ſizy, when inflammatory Fevers were epidemical, and they probably had got a little Cold juſt before; but this very rarely happens*. The extreme Parts of the Body are often cold, and ſometimes the Violence of the Pain cauſes cold clammy Sweats, and Faintings: Their Mind is generally much affected, and their Spirits ſunk very low. And when this Diſtemper has been improperly treated, this State of Coſtiveneſs, Pain, and Miſery has continued twenty or thirty Days, and ſometimes longer; for I remember a Caſe which being thus treated in a wrong Manner, the Patient continued, with ſome ſmall Intervals of being ſomething eaſier, in this painful Condition for ſix Months, or more, and then recovered by a different Method of Treatment, in one Week's time. When the Sick fall into the Hands of thoſe who treat them in this wrong Manner, the Pain continues to be very violent, and at times almoſt intolerable, and that for a long time; and then the Patient's Breath commonly acquires a ſtrong, fœtid, ſtercoraceous Smell, like Excrements, from a long Retention of the Fæces, and an Abſorption of the putrid Effluvia from them into the Lacteals, by the ſtrong convulſive Contractions of the Guts: And when the Pain in the Bowels has continued long, and at laſt begins to abate, a Pain

* See the foregoing Obſervations on the Air, and Epidemical Diſeaſes.

a Pain in the Shoulder-points, and adjoining Muſcles, comes on, with an unuſual Senſation and Tingling along the ſpinal Marrow; which ſoon after extends itſelf from thence to the Nerves of the Arms and Legs, and they become weak, and that Weakneſs increaſes till thoſe extreme Parts become paralytic, with a total Loſs of Motion, though a benumbed Senſation often remains.

The ſubtle Cauſe of this Diſeaſe, is ſometimes carried by a ſudden Metaſtaſis of it to the Brain, and produces a Stupor, or a Delirium; and ſoon after the whole nervous Syſtem is ſo affected, as to produce ſtrong Convulſions, which too often are followed by Death. At other times, the Violence of the Pain reverts the periſtaltic Motion of the Inteſtines, and violent Vomitings, and all the Symptoms of a *Miſereri mei* are produced, and the Patient being exceedingly reduced by the long Continuance of the violent Pain, it is too frequently followed by the ſame Fate.

The Cauſe of this Diſeaſe will often lay ſtill in the Legs and Arms, without giving the leaſt Senſation of Pain, and ſometimes is very ſuddenly tranſlated from them to the Bowels, or Head; where it inſtantly produces the moſt violent Pain, and often fatal Effects: And as this Metaſtaſis is ſo very ſudden, it ſhews that the Humour, or Cauſe, is exceeding ſubtle, as I have often obſerved; and I will beg Leave

to

to relate a remarkable Caſe, which I ſaw in a Gentleman when I lived at Bath.

He had laboured under this painful Diſeaſe ſome Years in Maryland, which at laſt rendered his Hands and Arms paralytic; and they had continued in that uſeleſs State two Years, without any Pain in them all that Time; he had no Strength, and little Motion, but a tolerable Degree of numb Senſation in them: And during theſe two Years, he was pretty free from any Pain in his Bowels. He came to Bath, drank the Waters, and bathed in them; and I ſuppoſe took proper Medicines with them three or four Months, and returned to London without any Relief. The next Spring he came to Bath again, and ſent for me, and informed me how he had proceeded the Seaſon before; and then was ſo exceedingly uneaſy at the Loſs of the Uſe of his Hands, and his not being able to write to his Family, that he ſaid he was determined to have the Uſe of them reſtored if poſſible, how dangerous ſoever the Attempt might be: I told him, that if the Cauſe or Humour could be removed from his Hands, it probably would return to his Bowels with the ſame violent Pain as before; or it might poſſibly be carried to his Brain, with more fatal Effects: He thought that was not poſſible, as it gave him no Pain in his Hands; and ſaid he was reſolved that if I would not try to remove it, ſome

ſome other Perſon ſhould attempt it; who he was pleaſed to ſay, probably could not give him that Aſſiſtance as he thought I could, if it did ſo; and inſiſted ſo ſtrongly on my attempting to remove it from his Hands; that at laſt I unwillingly aſſented to try: Accordingly he had his Hands and Arms pumped at the Hot-pump, then anointed with *Liniment. Saponac.* mixed with ſome chemical Oils, then wrapped up in Flannel, in order to continue their Sweating, and if poſſible to carry the morbid Matter off that way; and to aſſiſt which, he took a Draught with *Balſ. Peruv. gut.* xxx. immediately after it: He ſlept well that Night without any Alteration, and repeated all the ſame Method the Night following, ſlept, and was eaſy till towards Morning, when he awakened with the moſt excruciating Pain in his Bowels, and his Hands perfectly reſtored to their Uſe and Motion, as well as ever before. The Pain in his Bowels was now ſo violent, that he deſired the Attendants to ſhoot him, or put an end to his Miſery any way. Tho' the morbid Matter had laid in his Hands, tho' on their Nerves, for two Years before, without giving the leaſt Senſation of Pain; yet now being removed to his Bowels, it gave him as great Pain as ever before. In this Condition I came to him, and preſently gave him a Draught with *Balſ. Peruv. gut.* xl. *Philon. Londin.* ℈i. and in leſs than five Minutes time, the Pain was entirely removed

removed from his Bowels, and his Hands became paralytic as before, in leſs than a Minute's time, but without any Pain in them. This Metaſtaſis was therefore produced by the *Balſ. Peruv.* before the Opiate could act; and as the morbid Matter was thus put in Motion, I told him that we would try to carry it off, by only bathing his Hands and Arms in the warm Bath-water every Night, and ſweating them in warm Flannel after it, (without either pumping it on them, or uſing the Liniment) and taking the *Balſ. Peruv.* with a corroborating Bitter, in the Bath-water, which he did, and recovered the perfect Uſe of his Hands, without any Return of the Pain in his Bowels, or elſewhere, in two or three Weeks time.

Various Methods of Cure have been attempted and uſed in theſe Parts of the World. As they were ſo coſtive, ſtrong Purgatives and Clyſters were much uſed, from the firſt Appearance of this Diſeaſe, almoſt down to this Time; but all the ſtrong draſtic Catharticks, (and the weaker were thought inſufficient, as the ſtronger did not operate) do ſo irritate the Stomach and inteſtines, and thereby increaſe the Pain and the convulſive Contractions and Spaſms of the Guts, and rendered them more obſtinate and worſe; ſo that theſe Medicines were generally either ſooner or later rejected, almoſt without ever paſſing, and the Clyſters were moſtly returned without having any Effect, but that of increaſing the

the Spaſms and Pain : And if they chanced to paſs, they ſo much increaſed the Pain and convulſive Spaſms, that they either inverted the periſtaltic Motion of the Inteſtines, and brought on a *Miſereri mei*, or caſt the morbific Matter upon the Brain, and produced ſtrong Convulſions ; both which moſt commonly ended in Death : Or if the poor Patient eſcaped with Life, he loſt the Uſe of his Limbs, and generally dragged on a miſerable helpleſs Life to the End of his Days. This Method was therefore juſtly exploded ſeveral Years ſince, though I have known it propoſed by a Phyſician of ſome conſiderable Practice ; tho' in general the Diſeaſe and its Nature and Cauſe, are now better known.

The honeſt and worthy Dr. *Sydenham* treated this Diſeaſe (which is ſome chance times ſeen in England) with giving *Balſ. Peruv. a gut.* xx. *ad gut.* xl. *bis vel ter de die in pauco Sacchari*, and with much better Succeſs than the Method above, for this is a valuable Medicine in this Caſe.

The ingenious Dr. *Warren* adviſes a Method of treating this Diſeaſe, which is more judicious, and better adapted to the Nature and Cure of it than either of them ; and I think that ſome conſiderable Improvements in the Knowledge of this Diſeaſe, have been made both in its Theory, as alſo in the Practice, or Manner of treating it, ſince his Time.

From

From the Nature and Symptoms of this Diſeaſe, the ſtrong convulſive Contractions and Spaſms which attend it, without an Inflammation or Fever; and the ſudden Metaſtaſis's of its Cauſe, from one Part of the Body to another, which ſometimes happens; it plainly appears, that it proceeds from a very ſubtle Cauſe, which irritates, and chiefly affects the Nerves; thoſe of the Stomach and Bowels firſt, whence thoſe painful, ſtrong, convulſive Spaſms in them; and ſometimes the Brain and whole Syſtem of the Nerves, whence the Convulſions; and laſtly thoſe of the Hands and Feet, whence the Loſs of their Motion: And the Diſeaſe and its Symptoms being increaſed and aggravated by ſuch things as irritate and ſtimulate thoſe Parts, which confirm this Opinion, and at the ſame time indicate to us the proper Intentions of Cure of it; and they are theſe,

1ſt. *To abate the Pain, and take off the Irritation of the Nerves, from whence the convulſive Spaſms ariſe.*

2dly. *To procure a free Paſſage through the Bowels, and ſo carry off the morbid Matter that Way, without increaſing the Irritation.*

As this Diſeaſe proceeds from ſomething which greatly ſtimulates and irritates the nervous Coats of the Stomach and Inteſtines, and thereby produces thoſe painful convulſive Contractions and Spaſms, which always attend it; it is evident that whatever will abate

and

and take off that Irritation, muſt take off the convulſive Contractions alſo, and abate the Pain; and whatever will increaſe the Irritation, muſt increaſe them and the Pain alſo: And as all Emeticks and ſtrong draſtick Purgatives, are well known to operate by their ſtimulating and irritating Quality, ſo they are found always to increaſe the convulſive Spaſms and Pain, which attend this Diſeaſe. And on the contrary, as it is as well known that Opium takes off all Irritation and Pain the moſt effectually, eſpecially where the Nerves are principally affected; as in this, and the Opiſthotonos and Tetany, and ſome few other Diſeaſes; wherefore Opium is in this Caſe a principal Remedy, and often repeated Experience has fully confirmed this: And we have found the following Method of treating this Diſeaſe, to be the moſt ſafe, expeditious, and ſucceſsful; and therefore recommend it to others, at leaſt till they can find a better.

When I have been called in, and found the Patient was ſeized with this Diſeaſe, and that the Pain at the Pit of the Stomach, and in the Bowels, was very great, as it generally is; in order to abate that Pain and take off the Irritation and Spaſms, I always firſt give an Anodyne; and have generally found ſome of the following Forms to anſwer the beſt, with Variations *pro re nata.*

℞ *Extracti Thebaic. gr.* ij. *vel* iij. *fi. Pilul. Vel* ℞ *Philon. Londin.* ℈i. *Extract. Thebaic. gr.*

gr. i. *vel.* ij. *Balſ. Peruv. gut.* x. *m. fi. Bolus*; *Vel* ℞ *Aq. Menthæ Simp.* ℥iſs. *Extract. Thebaic. gr.* ij. *vel* iij. *Balſ. Peruv. gut.* xx. *Syr. e Mecon.* ℥ſs. *m. fi. Hauſt. ſtatim ſumend.*

By taking one of theſe, the Patient generally finds his Pain much abated, the Irritation is taken off, and the convulſive Contractions of the Inteſtines alſo; ſo that their periſtaltic Motion is reſtored, and the progreſſive Motion of their contained Fæces is more eaſily aſſiſted by a ſoft lenient Eccoprotic, (for moſt other Purgatives increaſe it,) which muſt be given as ſoon as he finds himſelf tolerably eaſy: But if the Pain does not ceaſe, or if it returns again, one of the above Opiates, or a ſomewhat ſmaller Doſe of it, muſt be repeated till the Patient finds himſelf tolerably eaſy: Theſe may be thought too large Doſes of the Opium, but I muſt obſerve, that ſmall Doſes will not anſwer in this Caſe, and the Tetany, &c. and they may be given very ſafely.

But if the Vomiting be ſo violent (as it ſometimes happens) that the Patient cannot retain any of theſe on his Stomach, not even the *Extr. Theb.* which is in ſo ſmall a Compaſs, I have found the following moſt commonly to ſtay, and take the Vomiting off alſo.

℞ *Tart. Vitriolat. gr.* x. *Ol. Cinnam. gut.* i. *vel Menthæ gut.* i. *m. exhibe in Cochl.* i. *Aq. Menthæ Simp. et repetatur omni hora donec ceſ-*

2 *ſant*

ſant Vomitiones, deinde exhibe Extr. Thebaic. gr. ij. *vel.* iij. *quam primum.*

This moſt commonly ſtays the Vomiting, even when the ſaline atiemetick Draughts will not, and the Opiate abates the Pain and convulſive Spaſms.

But if the Patient be plethoric, and any Symptoms of Inflammation attend, which very rarely happens, ten or twelve Ounces of Blood may be taken away, and his Stomach may be fomented with a proper emollient Fotus, and then theſe Powders may be given, and the Opiate.

And as ſoon as the Patient finds himſelf tolerably eaſy, I uſually begin to give ſomething of the following kind, every two or three Hours, till three or four Stools are obtained.

℞ *Cremor. Tartari Pulv.* ʒiij. *Tart. Solubil.* ʒiſs. *Tart. Vitriolat.* ϑij. *Ol. Cinnam. vel Menthæ gut.* iij. *miſ. fi. Pulv. in Doſ.* vi. *divid. de quibus capiat Æger unam ſecunda vel tertia quaq; hora in vehicul. quovis idon.* I uſually give them in a ſmall Draught of Wine-whey, Mint-tea, Poſſet-drink, or in an Infuſion of Bread toaſted brown, and infuſed in boiling Water.

After taking theſe Powders thirty or forty Hours, the Pain which was at the Pit of the Stomach, removes down towards the lower Part of the Belly, where a Senſe of Weight is uſually obſerved by the Patient, and preſages Stools to follow ſoon, and generally carries

both the Diſeaſe and its Cauſe quite off, ſometimes in twenty-four Hours time, but ſeldom fails to do it in three Days time: But if Stools are not thus procured, or that Senſe of Weight perceived in the lower Part of the Belly, by the Beginning of the third Day, I uſually add *Rad. Jalapii gr.* v. *vel* vi. to each Paper of the Powder, and give *Balſ. Peruv, gut.* xv. mixed with a little Sugar, and give it in the Whey with the Powders, which I think never fails to give Stools on or before the fourth Day; for I can truly ſay, that ever ſince I treated this Diſeaſe in this Manner, which is now above ten Years, I have never met with any Caſe, where the Patients would take their Medicines regularly, but Stools were procured on the third, or the Beginning of the fourth Day at the longeſt, and often ſooner; and the Diſeaſe with all its Symptoms were carried off thus with them. But I muſt obſerve, that the Opiate muſt be repeated whenever the Pain returns, and as often as it returns, whilſt they take theſe Powders.

And if from ſome particular Circumſtances of the Patient's Conſtitution, or his not taking the Medicines, or his Stomach not retaining them when taken, the Pain ſtill remains, or returns, and no Stools are obtained; the Opiate muſt be repeated till the Pain and Spaſms are taken off, or greatly abated, that the other Medicines may take effect; to which purpoſe, fomenting the Region of the Stomach and all the Abdomen, with an emol-

lient anodyne Fomentation, every ſix Hours, will be of great Service: Some have recommended a Semicupium, but often without Succeſs, as I have more than once obſerved; and I have always found that fomenting as above, has been of much more Service; as,

℞ *Fol. Altheæ (vel Alceæ)* Miij. *Menthæ Flor. Sambuci Chamemeli ana* Mij. *Sem. Lini.* ℥i. *Sapon. Venet.* ℥i. *Miſce*; *Coq. in Aq.* ℔viij. *deinde adde Theriac. Androm.* ℥i. *Piſelii Barbadenſ.* ℥ij. *Spir. Sacchari* ℔ſs. *Miſce, fi. Fotus, quo foveant Regionem Ventriculi et Abdom. pannis laneis in fotu tepide intinct. ſexta quaq; hora, donec ceſſant Dolores.*

And a Clyſter of the following kind, may be given immediately after the Uſe of the Fomentation; and I ſometimes order an anodyne emollient Liniment to be applied to the Abdomen, after the Uſe of the Fotus: As,

℞ *Decoct. & Fotus ſine Addit.* ℥viij. *Sapon. Venet.* ʒi. *Piſelii Barbad.* ℥ſs. *Balſ. Peruv.* ʒi. *Ol. Ricini Americani vel Ol. Palmæ Chriſti* ℥iſs. *m. fi. Enema.* ℞ *Ung. Dialtheæ, Ol. Palmæ Chriſt. ana* ℥i. *Opii Camphor. Balſ. Peruv. ana* ʒi. *Ol. Macis per Expreſ.* ℥ſs. *Miſce, fi. Liniment. ut ſupra utend.*

And if the Patient's Stomach cannot take or retain the Powders when taken, the ſame Powders may be diſſolved in a little boiling Water over the Fire, and a little *Aq. Menthæ, Balſ. Peruv.* mixed with Sugar, and made agreeable to the Patient's Palate, and given in

the ſame Quantity every two or three Hours, till they paſs and give two or three Stools; which they uſually do, much ſooner than any other ſtronger Cathartics, as theſe laſt uſually ſtimulate and increaſe the Diſorder.

If from the Violence of the Pain, and great Irritation of the Nerves, ſtrong Convulſions come on, as it ſometimes happens, I uſually give Muſk with the Opium, which ſeldom fails to take the Convulſions off; and then the above mentioned Powders, or a Solution of them, muſt be continued till ſome Stools are obtained.

As ℞ *Moſchi Orient. gr.* x. *Extr. Thebaic. gr.* ii. *vel* iii. *vel* iv. *Balſ. Peruv. q. ſ. M. fi. Pil.* iv. *vel fi. Bol. cum Balſ. Peruv. q. ſ.* This ſeldom fails to take off the Convulſions and the Pain, if they can be removed. But no ſtimulating volatile Salts, or Spirits, nor any Medicines uſually called Nervous, that will irritate; neither Veſicatories, nor Cathartics, that will ſtimulate; for all theſe muſt be avoided and forbidden, as they increaſe the Convulſions; and the laſt will increaſe the convulſive Contractions of the Bowels, and at laſt produce a Palſy of the Legs or Hands, or both: But the above Powders, or their Solution, muſt be continued till they paſs downwards, which they ſcarce ever fail to do, in three Days time at the longeſt, and relieve the Patient from his Miſery; and if they do not paſs ſo ſoon as expected, it is better to re-

peat the Doſe of Muſk and Opium, and wait a few Hours longer with Patience, in the Uſe of the above Powders, which will in a little time bring certain Relief.

It is poſſible that there may be ſome other particular Symptoms and Circumſtances, which may attend ſome peculiar Patients and Conſtitutions, which I have not mentioned here; but the judicious Phyſician will readily know from what is already ſaid, how to make all ſuch Alterations in the Medicines as may be neceſſary, and how to remove thoſe Symptoms.

And tho' the Patient generally finds himſelf quite eaſy and well, after theſe Medicines have procured him a few Stools; yet it is moſt commonly neceſſary to keep the Body a little open for a few Days after, by giving ſomething of the following Nature, once or twice a Day, in a little Whey or Gruel for a few Days. As, ℞ *Crem. Tart.* ʒi. *Tartar. Solubil.* ʒſs. *Tart. Vitriolat.* ϑſs. *Ol. Cinnam. gut.* i. *Miſce, fi. pulv. primo mane ſumend. in hauſtu ſeri lactis.*

But the Cuſtom of giving Calomel, or any other mercurial Preparation, or any draſtic Cathartic, either at this or any other time of this Diſeaſe, as recommended by a late ingenious and learned Author*, and is too often given here, I can by no means approve of, at this, or in any other time of this Diſeaſe;

* Dr. Town on the Diſeaſes of the Weſt-Indies.

becauſe it is well known that Mercurials have too great a Diſpoſition or Tendency to bring on a Palſey, as alſo to increaſe it; and that all ſtimulating draſtic Cathartics, are as bad or worſe, is as well known; both from Obſervation and Experience, as alſo from what has been ſaid before; but there are likewiſe other ſufficient Reaſons for our not giving them at this time of the Diſeaſe: becauſe the Patient is now generally reduced pretty low, and his Bowels at this time are too tender and ſore, by the preceding convulſive Spaſms and long continued Pain, to bear the Irritation of ſuch ſtrong Purgatives.

As to the Diet of the Sick in this Diſeaſe, it is almoſt unneceſſary to ſay that all their Aliments muſt be thin, light, and of eaſy Digeſtion, as in all other acute Caſes: becauſe they can generally take nothing but what is ſo; but I muſt obſerve, that ſome are preferable and much more ſuitable than ſome others that are equally light; and I have always found from repeated Obſervation, that Wine Poſſet-drink, and Wine-whey, and the Polenta made of Bread toaſted brown and infuſed in boiling Water, till it is the Colour of old Wine or Malt-liquor, agree much the beſt with, and ſits the lighteſt and eaſieſt on their weak Stomachs, and that often when no other Food or Drinkables will ſtay with them; and they are ſufficiently nouriſhing in ſo painful a Diſeaſe, eſpecially for four

or

or five Days, as it is now moſt commonly got over in that time, when it is treated in the manner above deſcribed: tho' they uſed formerly to continue as many Weeks, and ſometimes as many Months in this State of Miſery, and then too often came off with the Loſs of the Uſe of their Limbs, or died.

Light Food, of eaſy Digeſtion, ſhould be continued for a Week or two, and ſometimes longer, after the Pain is quite over, and they begin to recover; becauſe the Stomach and Bowels, are generally now very ſore and tender, from the Violence of the Pain which they have ſo long endured in them; and they often continue to be very ſore ſeveral Days after the Pain is quite over, till they recover their proper Tone and Strength again. To aſſiſt which I have always found that eaſy moderate Riding on Horſeback, and taking ſomething of the following kind, has both contributed much to their preſent Recovery, and alſo to ſtrengthen their Bowels, and prevent any Relapſe. As, ℞ *Cort. Peruv. groſſo modo pulv.* ʒi. *Cort. Aurant.* ʒiii. *Rad. Caſſumunar. Rhabarb. opt. ana* ʒiſs. *Balſ. Peruv.* ʒii. *Vini Maderienſ.* ℔ii. *m. Digere loco calid. S. A. et Cola, Colatur. capiat Æger Cochl. tria bis vel ter de die vacuo Ventriculo.*

The Palſey, which formerly very frequently ſeized their Hands and Feet, and ſometimes now alſo, and deprives them of their proper Uſe and Motion, at the going

off of this Diſeaſe, as before-mentioned, generally proceeds either from giving ſome ſtrong draſtic purging Medicines, or from ſome other wrong Treatment of the Diſeaſe; and when it is once fixed in their Limbs, is exceeding difficult to be removed and cured; eſpecially when the Patient has continued a long time in that lame helpleſs State. Drinking the Waters of ſome of the warm chalybeat and ſulphurous Baths, and Pumping the paralytic Limbs, or Bathing them (not the whole Body) in the ſame hot Waters, as thoſe of Bath in England, Aix la Chapelle in Germany, Barages in the Pyrenian Mountains, or thoſe in Portugal, and moſt probably thoſe in Jamaica, Nevis, and Carolina, if they were properly examined, and ſuitable Conveniences were made there, may anſwer as well: Theſe, with a little *Balſ. Peruv. Camphor and Extract. Valerian Sylveſt.* given in proper Quantities with thoſe Waters, twice a Day for ſome time, with daily repeated Frictions on the Spine of the Back and the paralytic Limbs, are the moſt likely, and have ſometimes ſucceeded and reſtored to them the Uſe of their Limbs.

But it is much more eaſy to prevent this Palſey from coming on, or ſeizing the Patient, by treating the Diſeaſe in a proper manner as before recommended; than it is to cure it, when it has ſeized and taken away the Uſe of the Patient's Limbs.

Of

Of the DYSENTERY.

THE Diſeaſes of the Inteſtines are rather more frequent in this warm Climate, than they uſually are in Europe, eſpecially the *Dyſentery*, and the *Colica Pictonum*, or Dry Belly-ache, both which we too frequently meet with; of the laſt I have already treated before. We alſo uſually have a *Colera Morbus*, eſpecially towards the latter End of the hot Months, as we uſually have in England, and the other Parts of Europe; but it is ſeldom ſo ſevere and violent here, as it often is there, tho' this Iſland is ſo much warmer; and we too often meet with Inflammations of the Bowels, and ſometimes with the *bilious Colic*, the *flatulent Colic*, and the *hyſteric Colic*, tho' the laſt is not near ſo frequent here as it is in England: We have alſo at times, all the different kinds of *Diarrhœas*, as a *Diarrhœa Febrilis*, a *Diarrhœa Colliquativa*, and the *Fluxus Hepaticus*, all which are very different Diſeaſes from each other, tho' they all affect the ſame Parts, and ſhould be treated with as different Methods and Medicines, according to their different Natures and Cauſes; but all much in the ſame manner as they uſually are treated in England, when they are treated in a rational and proper manner, with ſome Allowances for the Warmth of the Climate. But as theſe laſt

laſt are all judiciouſly treated on by ſeveral learned and able Phyſicians in Europe, it is not neceſſary to ſay any thing on them here, ſince they ſhould be treated here, much in the ſame manner as they are there; ſave that a more liberal Uſe of the *Antiſeptics*, eſpecially in the colliquative Diarrhœa and the hepatic Flux, is neceſſary, becauſe all the animal Humours uſually putreſce more readily, and to a higher Degree in this warm Climate, than they uſually do in the colder Countries.

But *Dyſenteries* are ſo frequent in this warm Climate, that they may be truly ſaid to be endemial, and more or leſs epidemical every Year; eſpecially during the rainy Seaſons. For after two or three of the hotter Months are paſſed over, and are ſucceeded by the uſual rainy Months of Auguſt and September, in which conſiderable great Quantities of Rain uſually fall, ſometimes for ſeveral Days ſucceſſively together, which are often followed by two or three or more clear and very hot Days, and then Rain again, and often ſo by Turns: the falling of the Rains, eſpecially when in great Quantities, renders the Air cooler, moiſt, and damp, for many Hours, and ſometimes Days, when it is very cloudy, which being ſucceeded by clear and very hot dry Days, as is often the Caſe, inſomuch that the Months of Auguſt, September, and October are generally called the hotteſt Months in the Year; theſe great and often ſudden Changes of the Air,

Air, almoſt conſtantly produce Dyſenteries, which uſually become frequent and epidemical, eſpecially among the Negroes, who are uſually little clothed, and more expoſed to the Inclemencies of the Weather, and among the white People alſo; and when the above Changes of the Air are ſudden and great, they too often become malignant or mali moris alſo.

For I have always found from the beſt Obſervations that I could make on the Variations of the Air and Weather, in this Iſland, that if the Months of May, June, July, and Auguſt were very hot and dry, and the following Months of September, October, and November were accompanied with much Rain, ſo that the Air was rendered cool, moiſt, and damp, and if the intermediate Days between the rainy Days, were very hot, I always obſerved that Dyſenteries were very frequent and epidemical, and generally were more or leſs malignant, as the above-mentioned Changes of the Weather were greater or leſs, more ſudden or more gradual, and ſhorter, or of longer Continuation.

Hence muſt we not conclude, that this great Drineſs and Heat of the Air, eſpecially when it continues long, ſo acts on our Bodies, as gradually to change their animal Oil and Salts, from their neutral, ſoft, bland, ſmooth, ſemiammoniacal State, to a ſemirancid and ſemivolatile acrid State, whereby they become unfit to perform the Functions of animal Life; and by their Acrimony ſo ſtimulate and irri-

tate

tate the moſt ſenſible Parts of the Body, as greatly to diſturb and oppreſs Nature? and as ſhe always endeavours to diſcharge and carry off whatever is ſo oppreſſive and offenſive to her, by ſome of the excretory Glands and Pores, and in this Caſe it is moſt probable that ſhe firſt endeavours it by exciting a free Perſpiration and Sweating, as theſe Evacuations are the moſt aſſiſted by the great Heat. But the ſudden falling of the Rain changing the Air ſo as to render it cool, moiſt, and damp, which as ſuddenly checks and ſtops that free Perſpiration and Sweating, and the Diſcharge of thoſe acrid Humours by thoſe ways being thus hindered, they are turned upon the Bowels, which they conſtantly ſtimulate and irritate; and ſo produce a continual Secretion and Diſcharge of the mucous Matter of the inteſtinal Glands, and probably ſome of the acrid Humours with it. This ſtill continuing, increaſes the Afflux of the Humours to thoſe Glands, where they produce an Inflammation of thoſe Glands, and the Heat and Fever are again increaſed by that Inflammation, and the Humours ſtill rendered more acrid by that Heat and Fever; and the Momentum of the Blood being thus increaſed, its red Globules are forced and diſcharged, with the mucous Matter of thoſe Glands, into the Inteſtines, and ſo carried off by Stool. And the Acrimony of the Humours being ſtill increaſed by the Heat of the Fever, and the Fever again increaſed by the

Acri-

Acrimony, and the thinneſt Parts of the circulating Fluids being continually carried off, the remaining Fluids are in time rendered too thick to paſs thro' the ſmaller Veſſels, which ſtill increaſes the Inflammation, and produces a Teneſmus, and violent Pain, with all the other bad Symptoms attending this Diſeaſe; which if not ſpeedily relieved, ſoon form Obſtructions, and a total Suffocation of the ſanguiferous Veſſels, which ſoon produces a Mortification of the Inteſtines, that ſoon ends in Death.

As we have Dyſenteries conſtantly returning every Year in the Weſt-India Iſlands, with thoſe Rains at that time of the Year, which are always epidemical, tho' not always equally malignant, no more than the Seaſons are always equally alike; may we not juſtly conclude, that the Dyſentery is moſt commonly thus produced from theſe Cauſes, eſpecially as theſe Cauſes are ſufficient to produce it?

Tho' it is alſo probable that it may be ſometimes produced by *infectious Miaſmata* alſo; which were exhaled from diſeaſed Bodies and are floating in the Air, and received into the Mouth with it when we breathe, and there ſtick to the Saliva, and are carried with it down into the Stomach and Inteſtines, where they produce all the above-mentioned Symptoms and Effects, when they meet with a Conſtitution fitted by the above-mentioned Cauſes to receive thoſe infectious Effluvia, and produce the

the Diſeaſe. However, I think, that we are certain from Obſervation, that this Diſeaſe, when it is thus produced in the manner as above, from the aforeſaid Cauſes, it often happens that after it has continued a conſiderable time, and many are ſeized with it at or near the ſame time, that the Humours are in time rendered ſo acrid, ſemivolatile, and putrid, that they become infectious, and being exhaled from their Bodies, but more eſpecially from the putrid offenſive Stools of the Sick, into the Air, are carried with it, and often infect thoſe who were well and ſound before; and thus it becomes both epidemical and contagious, tho' it was not the latter at its firſt Invaſion or ſeizing the firſt Patient. This I have often obſerved, eſpecially when great Numbers have laboured under it at the ſame time, as often happens among the Negroes; wherefore I have conſtantly ordered that the Cloſe-ſtools ſhould always be emptied immediately after they are uſed, and not ſuffered to remain in the ſame Room with the Sick: ſo that no more infectious putrid Effluvia might be either conveyed to the Sick, or to the Attendants; and I think it is a very neceſſary Precaution.

I have always obſerved, that all thoſe Diſeaſes, which are epidemical, generally ſeize the Negroes the firſt: Is it not becauſe they are little or thin clothed, and often poorly fed, and much more expoſed to all the Variations

riations of the Air, and Inclemencies of the Weather?

This Diſeaſe does not always ſeize the Patients in the ſame manner: Sometimes it ſeizes them with a Diarrhœa, which is moderate the firſt Day or two, but it gradually increaſes in all its Symptoms, till it becomes a perfect Dyſentery, with all its Symptoms. At other times it ſeizes them with an Oppreſſion and Sickneſs at their Stomachs, a gentle Rigor, with Pain in the Head, and ſometimes all over the Body, which are ſoon followed by a Fever, with griping Pain in the Bowels, and frequent griping Stools. The Sickneſs at the Stomach increaſes, and is often attended with a Reaching to vomit, or with Vomiting: The Fever increaſes; the Pulſe becomes very quick, and generally tenſe and hard, and ſometimes full, though rarely ſo full as it is in moſt other Fevers, neither is the external Heat of the Body uſually ſo great as it is in many other Fevers, though the internal Heat be greater. The Stools become more frequent, the griping Pain increaſes, and the Excrement diſcharged is mixed with much Mucus of the Guts, and conſiderable Quantities of Blood; and ſometimes nothing but Blood and Mucus is diſcharged by ſtool; at other times a bloody Sanies, or Ichor, like bloody Beef-brine, and a Teneſmus comes on, with a continual painful Needineſs or Deſire of going to Stool. All theſe Symptoms continue

tinue and increaſe, if not timely relieved by proper Remedies: The Fever increaſes, the Pulſe is very quick, the Thirſt and internal Heat great, though the external Heat continues to be leſs than in moſt other Fevers, as all the Humours have ſo great an Afflux towards the Bowels, which too often deceives the injudicious or uncautious Practitioner. Now the Patient's Strength ſinks, he grows delirious, his extreme Parts cold, accompanied with cold clammy Sweats; his Pulſe becomes irregular, unequal, and often intermits; the Stools ſometimes run from the Patient inſenſibly; the Coldneſs of the Extremities and the cold Sweats increaſe, and all the other Symptoms are worſe, the Patient grows very faint, and a Mortification ſeizes the Bowels, which ſoon ends in Death.

From the Nature of the preceding Cauſes, their Manner of acting, and the Symptoms which attend this Diſeaſe, we muſt take our Intentions of Cure, which are theſe;

Firſt, *To carry off thoſe acrid, putrid, and infectious Humours, as ſoon and as ſafely as we can; and to abate and take off the Fever.*

Secondly, *To ſtay the Purging, heal the inflamed and abraded Inteſtines; and then corroborate and reſtore their Tone and proper Action.*

As we always obſerve, that this Diſeaſe is conſtantly attended with a Fever, in a greater or leſs Degree; it is always neceſſary to take away ſome Blood, more or leſs as the Nature of

of the Fever, the Strength, Quickneſs and Fulneſs of the Pulſe do indicate, and the Strength and other Circumſtances of the Patient will permit; in order to abate the Fever and Inflammation as well as the Increaſe of Heat, Putrefaction, and Acrimony of the Humours.

And as there is ſuch an Afflux of the Humours to the Stomach and Bowels, attended with a Sickneſs, Reaching, and ſometimes Vomiting, an *Emetic* is clearly indicated; and the ſooner it is given, the better, both to carry off thoſe Humours, and as much of the infectious Matter as we can, as alſo to revulſe them from the Bowels, and clear the Stomach, that the Medicines to be given after may have the better Effect; and it is well known that the *Ipocacuanha* in Powder is the beſt in this Caſe, as it operates the ſafeſt, and ſomewhat reſtringes the Bowels after: and in order to anſwer the firſt Intention of Cure, and carry off as much of thoſe putrid Humours as we can, in the Beginning of the Diſeaſe, it is neceſſary to give a Doſe of *torrified Rhubarb* mixed with an *Opiate*, to procure the diſtreſſed Patient ſome Reſpite and Eaſe, and abate the Flux; and I have found ſomething of this Nature the beſt,

℞ *Rad. Rhei tor. pulv.* ℈i. *Electar. e Scord.* ʒſs. *Extract. Thebaic. gr.* iſs. *vel* ii. *Ol. Cinnam. gut.* i. *Syr. e Meccon. q. ſ. m. fi. Bol. hora poſt Emet. operat. ſumendus.*

If the Fever and Purging are conſiderably abated by theſe Medicines, as they ſometimes are, when given early at the Beginning of the Diſeaſe; giving ſomething of the following Nature, ſometimes takes the remaining Fever off, ſtays the Flux, and heals the Bowels, and ſometimes effects the Cure, or at leaſt greatly abates them, if a proper Regimen is preſcribed, and ſtrictly followed by the Patient.

℞ *Cort. Reſtring. Barbad.* (Baſtard Locus dict.) *Viſci Arboris Limonifer.* (Miſleto of the Lemon-tree dict.) *ana* ℥i. *Cort. Granator.* ℥ſs. *Cinnamomi* ℥iſs. *Miſce Coq. in Aq font.* ℔ii. *ad* ℔iſs. *et ſub. finem coction. adde Electar. e Scord* ℥i. *Coq. parum et Cola* ℔iſs. *Colaturæ adde Tinct. Terræ Japon* ℥i. *Sp. Nitri Dul.* ℥ſs. *Sal. Nitri. purif.* ℥ſs. *Syr. e Mecon.* ℥i. *m. fi. Decoc. cujus capiat Æger Cochl. tria vel quatuor tertia quaq; hora, vel poſt ſingulam alvi dejectionem liquidam.*

The Quantity of the Sal Nitre, and alſo of the Opiate here, may be increaſed or diminiſhed as the Phyſician ſees it neceſſary. I have here ordered the *Cortex Reſtring. Barbad.* and the *Viſcus Arbor Limonifer*, becauſe they can be eaſily gotten in Barbadoes, and are the moſt efficacious cooling Reſtringents in this and ſome other Caſes. The firſt is the Bark of a non-deſcript. Tree; and makes a fine Extract, which, as well as the Bark, both greatly reſtringe and ſtrengthen without Heating, and both may be brought

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to England; and I wiſh we had them here for the Benefit of the Profeſſion, and the Good of Mankind: and the Miſleto of the Lemon-tree, on which and the Lime-trees it only grows, and is a fine ſubacid cooling Reſtringent, and was uſed as a Secret in the Cure of this Diſeaſe for many Years, but I fear will not retain its Virtues when brought to England, neither will it be got to grow here; but both may be tried: I have often experienced the good Uſe of both this, and the above Bark and Extract, and wiſh we had them here.

As I write on this Diſeaſe, as well as on moſt of the other Diſeaſes in this Book, principally for the Uſe and Benefit of the Inhabitants and Practitioners in Barbadoes, and the other Weſt-India Iſlands, who in general have too little Learning, I have been more explicit and copious in the Theory and Reaſoning on thoſe Diſeaſes, than would have been neceſſary if I had only written for the Uſe of the Learned, which I hope the laſt will excuſe, and pardon this and the preceding Digreſſion.

Giving Sal Nitre alſo in this Caſe, where ſuch a violent Purging attends, may be thought by thoſe who are not able to ſee the Reaſons for giving it, not only a *new*, but an injudicious Practice, as it is known that Nitre will ſometimes gently looſen the Belly. But I muſt obſerve to ſuch, that it rarely or never happens that the Purging, though violent, takes the

Patient off, but the Violence of the Fever, and the Inflammation of the Inteſtines, which ends in a Mortification, eſpecially in this hot Climate, and kills him. And that it is both injudicious, and bad Practice to ſtop the Purging, by ſtrong Reſtringents and hot alexipharmic Medicines, before the Fever and Inflammation are abated or taken off: And if they can ſtop the Purging by ſuch Medicines, the Fever will be thereby ſo increaſed, as to bring on a Train of fatal Symptoms, which will ſoon put an end to his Life. Wherefore the Phyſician's greateſt Care ſhould be to take off the Fever and Inflammation, by Bleeding, *&c.* and a proper Uſe of *Antiphlogiſticks*, given with gentle cooling Reſtringents, and ſuitable *Anodynes* to abate the Irritation on the Bowels. And in this Caſe I have always found Nitre thus given, or mixed with a little *Elect. e Scord.* or *Balſ. Locotel.* to be the beſt *Antiphlogiſtick*.

And even to Children, when the bloody Stools have been frequent, and with much Pain, that after *Bleeding*, an *Emetic*, and a little *torrefied Rhubarb*, giving *Nitre* mixed with a little red Coral, in an anodyne teſtaceous Julep, has in a ſhort time, both taken the Fever and Inflammation off, and the Purging alſo ſoon ceaſed, and they ſoon recovered, being taken at the firſt Beginning of the Diſeaſe. For if we can but take off the Fever and Inflammation, the Purging generally

ly ſoon ſtops, as its Cauſe is removed: Or if by reaſon of too great a Laxneſs and Weakneſs of the Bowels, the Purging continues, it may be ſoon ſtayed by a moderate reſtringent Anodyne and a Clyſter.

But if the Fever ſtill continues, or the Inflammation remains, after Bleeding, and the Uſe of the above-mentioned Medicines, and the bloody Stools with much Pain are not abated, as too often it happens, Bleeding muſt be repeated on the ſecond or third Day after the firſt Bleeding; and in ſome Caſes more than once, eſpecially where the Quickneſs, Hardneſs, and Fulneſs of the Pulſe indicates it; and that to ſuch a Quantity as the Urgency of the Symptoms require, and the Strength of the Patient will bear: After which, it will be neceſſary to give the *Ipocacuanah* in ſmall Doſes, from gr. ij to gr. v. mixed with ℈i. of *Theriac. Androm.* twice a Day, and an Anodyne, after it has vomited the Patient once or twice, for three or four Days, and the antiphlogiſtick anodyne reſtringent Decoction as before, in the intermediate times of taking the *Ipocacuanha*, which may alſo be given after, if the Stools ſtill continue; theſe ſeldom fail to give Relief, and take off the Diſeaſe.

But if the Fever and Inflammation are conſiderably abated, or taken off, and yet the bloody or Brine-like Stools continue, and are frequent; giving a Doſe or two, and ſome-

times a third Doſe of the *Stibium Ceratum*, at proper Diſtances after each other, and a ſuitable Opiate a little time after the laſt, has been of great Service: But I muſt obſerve that this Medicine, how much it may be recommended and extolled by ſome Perſons, though it may be a good Medicine when properly timed; yet as it is frequently and promiſcuouſly given at all times of this Diſeaſe, and in all Circumſtances, by ſome Perſons, it cannot ſucceed; for if the Fever and Inflammation are not firſt taken off, or conſiderably abated, it ſeldom or never anſwers their Expectations: But theſe being taken off, or greatly abated, it ſometimes proves to be a good Medicine, though I think I have ſeen the *Ipocacuanha* in ſmall Doſes anſwer much better even then, when it would not.

But when we find that the Fever and Inflammation ſtill continue, after all the repeated Evacuations of Bleeding and Vomiting, &c. and the Patient is reduced ſo low, that he cannot bear any further Evacuations, and yet the Fever continues, with a very quick, low, weak Pulſe, and is delirious, his Skin hot and dry, and the Stools frequent and bloody, or Brine-like; I have with great Pleaſure ſeen, that giving the *Ipocacuan.* in ſmall Doſes, viz. gr. iij. and repeating it every three Hours, till the Patient had taken four Doſes, and increaſing the laſt Doſe to ſix or ſeven Grains, it has, after giving a gentle Puke or

two,

two, almoſt ſurprizingly reſtrained the Flux, and brought on a fine free Diaphoreſis all over the Body, which was continued for ſome Hours, by being properly encouraged by drinking ſmall warm Liquids; and the Delirium, Tremors, and all the other bad Symptoms went off, and the Patient has from that time ſoon recovered, by only giving a few Doſes of a reſtringent diaphoretic Opiate, as before; and was thus as it were ſnatched from the Jaws of Death.

But we cannot always expect to meet with ſuch happy Succeſs, in every Patient and Caſe; yet in theſe Circumſtances, I have more than twice ſeen this Method ſucceed; ſo that the Fever and all its bad Symptoms have been either taken off, or ſo much abated, that by giving ſomething of the Nature of the above-mentioned reſtringent anodyne Decoction, or ſuch like Medicines for a few Days, and a few proper Clyſters, with a ſuitable Regimen, the Fever has been entirely taken off, and the Purging alſo, and they recovered; at leaſt I have always found this Method the moſt ſucceſsful, even after all other Methods have failed.

There is another painful Circumſtance which frequently attends this Diſeaſe, which is a painful Griping accompanied with a great Soreneſs in the Bowels; and moſt commonly ariſes from the great Heat and Acrimony of the Humours, and their continual Motion

downwards; and the fine ſoft Mucus which lines and defends the Inteſtines being carried off by the ſo much Purging, thoſe acrid Humours irritate and inflame, and ſometimes almoſt corrode the *Tunica Villoſa* of the Guts, ſo that they are in part excoriated; and ſometimes large Portions of that fine Membrane has been known to come away ſeveral Inches long, by which the Inteſtines become exceeding ſore and painful. When this Pain and Soreneſs is found to be pretty high up in the Guts; *Balſ. Locotelli*, or the following Electary, and the *Wax Emulſion*, are found to be the moſt effectual Remedies: As, ℞ *Electar. e Scord. Balſ. Locotel. ana* ʒi. *Sperm. Ceti, Pulv. e Bolo cum Opio ana* ʒiſs. *Syr. Balſamic. q. ſ. Miſce, fi. Elect. cujus capiat Æger q. Nuc. Moſc. quarta, quinta vel ſexta quaq; hora, ſuperbib. Emulſ. cum Cer. per Cochl. tria.*

But when the Pain and Soreneſs are found to be lower down in the Belly, it moſt commonly ariſes from an Excoriation, or from little ſmall Ulcerations of the *Rectum* or *Secum*, which the acrid Humours irritate, and produce a painful Teneſmus; in which Caſe, not only the above-mentioned healing Medicines are neceſſary, but ſoft balſamic healing Clyſters muſt be frequently injected alſo; which may be made of fat Broth, or Milk, mixed with *Balſ. Locotel. Wax, Sperm. Ceti*, and an Anodyne; as, *Elect. e Scordio, Theriac. Androm. or Tinct. Thebaic.*

But

But this Teneſmus, eſpecially when the Diſeaſe has been ſevere, and has continued a conſiderable long time, and is ſituated low down in the Belly, moſt frequently ariſes from the indurated Fæces; which are often formed into hard round Lumps like Balls, by the convulſive Spaſms of the Guts, and are almoſt half baked by the Heat and Fever attending the Diſeaſe, and often are pretty large and very hard, as I have often obſerved them to come away in the latter End of it, that it is almoſt ſurprizing to think how theſe hard Lumps ſhould remain in the Guts ſo long, and ſuch a violent liquid Purging continue all that time, and they not be carried off with it; as is almoſt incredible, if they did not ſo frequently come away at the laſt: And ſo long as theſe Lumps continue in the Inteſtines, they muſt very much irritate and ſtimulate them, as they are in that tender ſore excoriated State, and ſo long will the Teneſmus remain. In this Caſe, a proper Purgative and ſuitable Clyſters, muſt be given to carry thoſe Lumps off; but I muſt obſerve, that I cannot approve of giving *Sena* in any Shape, or at any time in this Diſeaſe, notwithſtanding that the great and honeſt Dr. *Sydenham* (to whom all profeſſing the medical Art are much obliged, for the many uſeful Obſervations and Diſcoveries which he made) frequently uſed and recommends it; becauſe it is obſerved that this Drug always increaſes either

either more or leſs, any Inflammation; but this probably was not known in his time: and as ſome Degree of Inflammation, more or leſs on the Inteſtines, always attends this Diſeaſe; giving *Sena* muſt conſequently increaſe it, and render the Evil worſe: But I have always found that giving a little *Manna* and *Rhubarb*, with a little *Sal. Polychreſtum* and *Oil*, ſeldom fail to carry theſe hard Lumps quite off; and it may be aſſiſted if neceſſary with a Clyſter of warm Water, a little Honey and Oil, and a ſmall Quantity of Soap to diſſolve thoſe Lumps, and render the Gut more ſlippery, and their Exit more eaſy; which Method ſeldom fails. And when theſe Lumps are thus carried off, the Patient uſually ſoon recovers with the Uſe of the above-mentioned balſamic healing Medicines, and a Clyſter or two of the ſame kind; with a ſuitable ſoft, healing, and nouriſhing Diet, at the ſame time.

I am very ſenſible that there are, and often may be, ſome other Circumſtances, and conſiderable Variations in the Symptoms which at times do attend this Diſeaſe, either ariſing from the different epidemical Conſtitution of different Years, or from the different Conſtitutions of the Patients, which may require ſome Variations in the Method of treating them, as well as in the Medicines to be given: But it is neither poſſible nor neceſſary, to deſcribe or mention them all here; ſince every judicious

judicious Phyſician will be able to obſerve them, and to make ſuch Alterations both in the Methods of Cure, and ſuch Variations in the Medicines, as may be neceſſary: And theſe are ſufficient, and I hope may be of Service to ſome in the Practice; wherefore I communicate them to the Public, and ſincerely wiſh that they may be as uſeful to others, as ſome of the Obſervations have been to me.

Of the OPISTHOTONOS *and* TETANY.

THIS is a moſt painful and dangerous Diſeaſe, which was well known, and is often mentioned by the great *Hippocrates*, and the other *Greek Phyſicians*, though they moſt commonly ſpeak of it as the Conſequence and Effect of Wounds made by Darts, or other Weapons, and have not ſo accurately deſcribed it as it could be deſired; and few of the Moderns have done any more than curſorily mentioning it, not even *Bontius*, who lived ſome time in the Eaſt Indies, has but very imperfectly deſcribed it; though it is probable that he ſaw it often, although it is ſo very ſeldom ſeen in England, and the other cold northern Countries, yet it is ſo frequently ſeen in the Weſt-India Iſlands, and the neighbouring warm Countries; that it may juſtly be ſaid to be indigenous, or at leaſt endemial in thoſe Countries which are with-

in or near the Torrid Zone; hence it might be more frequent in *Greece* than it is in England, as the Iſland of *Coos* and adjacent Countries, where the great *Father of Phyſic* lived and made his Obſervations, are much warmer.

The Greeks diſtinguiſhed this Diſeaſe by theſe three Names, as they expreſs the primary Effects it has on the Body, ἐμπροσθότονος, ὀπισθότονος, τετυνος, which the Latins called by one Name, *Rigor Nervorum*, and we a *Tetany* or *Convulſion*. When the Body was bowed and bended down forward, the Greeks called it an *Emproſthotonos*; and when it was bended backwards in a Curve, and immoveable, they called it an *Opiſthotonos*; and when the Body was fixed in an erect, rigid, immoveable Poſture, like a Statute, or when a Limb was ſo fixed, they called it a *Tetanus*. The firſt is very ſeldom ſeen, tho' the two laſt are very frequent in the warm Climates.

This Diſeaſe, though diſtinguiſhed by theſe three Names, may moſt properly be called but one Diſeaſe; as they generally all three ariſe from the ſame Cauſes, and only differ from each other, as they reduce the Body into the three different Poſitions before-mentioned. And all theſe, or this one Diſeaſe, in general ariſes from three Cauſes, which are very different from each other; though in ſome particular Caſes and Conſtitutions there may be ſome other concurring Cauſes: The firſt, is from

from a ſlight ſmall Puncture with a Pin, Needle, or ſmall Bone of a Fiſh, a Nail, or ſmall Splinter of Wood, accidently run into the Foot, Hand, Finger or Toe, the Head, or ſome other nervous Parts of the Body; or from a ſmall Wound with a ſharp Edge of a Stone, often not much more than Skin deep, and too often from the Ligatures on the Arteries (probably with a Nerve,) after the Amputation of a Limb: It is difficult to conceive how ſuch a ſmall ſlight Puncture or Wound, and ſuch a trifling Cauſe as a ſmall Puncture with a Pin, a ſmall Bone of a Fiſh, or a Nail, or a ſmall ſlight Cut with a ſharp Stone, but little more than Skin deep, in ſuch remote Parts of the Body, ſhould produce ſuch violent Symptoms, and ſo fatal a Diſeaſe; nay it is almoſt incredible to thoſe who never have ſeen ſuch Caſes, yet it is but too certainly true, as both I and many others have but too often ſeen them.

Secondly, It often ariſes from taking Cold, by ſuddenly expoſing the Body to a Current of cool Air, when warm and ſweating, or being ſuddenly wet when warm; or going into cold Water when ſweating. And laſtly, young Children are frequently ſeized with this Diſeaſe, from a Retention of the Meconium, or from a cheeſy Matter, or ſomething which is acrid, taken into the Stomach and Bowels.

Theſe Cauſes are all too frequently followed by an Opiſthotonos and Tetany, and when

when from the firſt mentioned Cauſes, it moſt commonly comes on between the tenth and fourteenth Day after ſuch ſlight Puncture or Wound is made, and ſometimes (though very rarely ſooner) than the tenth Day, and often when the ſmall Wound has given the Patient little Pain or Uneaſineſs, and has had no bad Appearance, but has digeſted and looked well, and often when the Puncture or Wound has been perfectly healed up by ſome common Plaſter, and has been well for ſeveral Days before the Convulſions have come on, and that without any Fever, or other Symptoms but as hereafter mentioned.

But when this Diſeaſe proceeds from the ſecond mentioned Cauſes, viz. from ſuddenly taking Cold, it uſually comes on much ſooner, though they have only had the common Symptoms of catching Cold, with little or no Fever, till the fourth or fifth Day after the convulſive Symptoms have ſeized the Patient, when a Fever of the inflammatory Kind uſually comes on.

In Children, from the above-mentioned Cauſes, it uſually ſtill comes on ſooner.

Symptt. The Patient uſually firſt complains of an uneaſy Senſation, and ſmall Tenſeneſs about the Præcordia, and a Stiffneſs in his Jaws, which gradually increaſes, and brings on a Difficulty in Swallowing, but no Swelling either internally or externally appears in the Throat; and a Pain all along the Spine of the Back,

Back, with a Contraction and Stiffneſs of the dorſal Muſcles, and thoſe of the Neck ſoon follow, and gradually increaſe for a Day or two; and the Head, Neck, and Back-bone, are gradually and ſtrongly bended backwards, and the Body is fixed and retained in that retrocurved Poſture, and the Jaws are now cloſe locked and immoveably fixed, and moſt commonly an Impoſſibility of Swallowing any thing, from the Muſcles ſerving for Deglutition being fixed in a rigid State, now comes on; if any thing that is Liquid can be got into the Mouth, which is uſually about the third or fourth Day, and ſometimes ſooner; now frequent ſtrong convulſive Spaſms come on, firſt under the Sternum and on the Diaphragm, and quickly extend themſelves to the Jaws, Neck, and the whole Spine of the Back, with ſuch Violence and Force, as well as dreadful Pain, as often raiſe the Body with a ſudden Jerk quite up from the Bed, or Place on which it lays, to a conſiderable Height; at other times only ſo that his Occiput and Heels only touch them, the Body forming Part of an Arch, if the Patient lays on his Back, which is the eaſier Poſture of the two, or almoſt a Circle, by his Head and Heels being brought ſo near together if he lays on his Belly, which they rarely can bear to do, tho' ſometimes the Head, Neck, and Back, are only retrocurved, and the Legs ſtrongly and rigidly extended. As the Diſeaſe advances,

theſe

theſe ſtrong convulſive Spaſms become more frequent, and alſo more violent, and now return every ten, fifteen, or twenty Minutes; which reduces the poor Patient to the moſt diſtreſſed Condition, both from the Violence of the Pain which he continually feels, and the Dread of the frequent Returns of thoſe violent convulſive Spaſms, which greatly increaſes it, and he continually expects; and now the Diſeaſe is become a perfect Tetany, and in the Intervals between thoſe Spaſms, he lays in a rigid immoveable State; except that they moſt commonly can move their Tongue and ſpeak, as alſo their Fingers, but not their Arms. When the Diſeaſe proceeds from a Puncture or Wound, I never yet ſaw or obſerved any Fever attend it; the Pulſe is generally ſmall, regular, and rather ſlower, but uſually a little harder, as well as the Heat of the Body, no greater than when in Health; and they uſually breathe freely and well, as when well, except during the time of, and a little after the Spaſms, when the Pulſe is often ſmall, fluttering, and irregular, for a ſhort time, and the Breathing quick as if violently exerciſed, but the Spaſm being over, they both ſoon become calm, ſlow, and regular again; but the Body is ſometimes covered with Sweat, from the Violence of the Agonies, yet no feveriſh Heat attends; neither is the Thirſt great, or the Tongue foul, though it is often ſtiff and attended with a Torpor, ariſing

from the Contraction of its Muſcles; the Urine not much altered, only a little higher coloured and leſs in Quantity, as they can drink little, and ſometimes none: The Belly is generally coſtive, and drawn inward and flat, and all the abdominal Muſcles are tenſe, rigid, and contracted, as are moſt of the Muſcles of the Body after the Tetany comes on. They ſeldom can ſleep, they only get ſome ſhort Slumbers, from which they are ſoon rouſed by the convulſive Spaſms, eſpecially towards the latter End of the Diſeaſe, when they can ſeldom get any: The Countenance is moſtly pale and contracted, and ſtrongly expreſſes great Anxiety and Diſtreſs. Thus the convulſive Spaſms continue to return more frequently and with greater Violence, till at laſt a general ſtrong Convulſion puts an end to their Miſery; and in this Caſe they moſt commonly retain all their Senſes to the laſt Moment.

They uſually continue in this State, with theſe violent Symptoms, gradually increaſing to the fifth or ſeventh, and ſometimes to the tenth or eleventh Day; but when the Diſeaſe comes on with more Violence at the firſt, and its Symptoms increaſe more quickly in their Violence, and return more frequently alſo; they often put a Period to Life on the third or fourth Day, if the Violence of the Symptoms are not abated by ſuitable Medicines;

at other times when leſs violent it continues longer, and uſually for ſome Weeks before they perfectly recover the proper Tone of the Nerves and Muſcles again; but if they ſurvive the ninth or eleventh Day, they moſt commonly recover in three or four Weeks time; though not the perfect Tone of the Nerves, and the Uſe of the Muſcles, in leſs than five or ſix Weeks time, and ſometimes longer.

When the Opiſthotonos and Tetany ariſe from taking Cold, it is attended with all the ſame Symptoms, and they uſually come ſooner on after the taking Cold, than when from a Puncture or Wound, though not uſually with more Violence, and without a Fever in the firſt three or four Days, tho' the Pulſe is uſually a little more full, and a little harder, though ſeldom quicker during thoſe firſt Days, but moſt commonly about the fourth or fifth Day, the Pulſe begins to be both more full, and more quick and hard, and a Fever comes on with ſome inflammatory Symptoms, which indicate Bleeding, and ſome are a little delirious at times, and their Blood is now a little more florid and more denſe, than it uſually is in the former, where it uſually is more lax and of a looſer Texture, and ſomewhat leſs florid, and ſometimes mixed with darker Spots: But in all other Reſpects, except that the Thirſt is greater, the Symptoms and Progreſs

greſs of the Diſeaſe are the ſame as in the other, as alſo its fatal Effects rather more ſo, if not timely relieved by proper Remedies.

Infants likewiſe, who are ſeized with this Diſeaſe, uſually have the Symptoms and the Convulſions, as alſo the Tetany coming on ſooner, and generally more or leſs of a Fever with them; and the *Inſultus Epilepticus*, as Dr. *Sydenham* calls it, if it continues any time, is in this hot Climate changed into a Tetany in them.

It is generally obſerved that the Negroes are more ſubject to this Diſeaſe, than the white People uſually are; and it muſt be allowed, that the Negroes are ſeized with it much more frequently than the white People are: But I apprehend that this only proceeds from the Negroes going barefoot, and thereby being more expoſed to ſuch Injuries, and their being worſe clothed, and accuſtomed to Labour with, or in ſuch work as renders them more liable to get ſuch Wounds, and a Cuſtom which many of them have of going into the cold Water when they are Sweating on the Road, &c. which render them more liable to this Diſeaſe; but the white People are much more ſubject to this Diſeaſe in this hot Climate, than they are in the colder Countries.

As this Diſeaſe ſo frequently proceeds from ſuch ſlight Cauſes, it is extremely difficult to account for it, in a rational and ſatisfactory Manner: To ſay that it is effected by the Con-

ſent of the Nerves, one ſmall Nerve being lacerated or wounded, gives great Pain, and that is communicated to, and affects the whole nervous Syſtem: This may be plauſible, and may ſatisfy ſome People, but it is far from being clear and ſatisfactory, to an exact Enquirer; for the Pain is generally ceaſed in the wounded Part, and the ſmall Wound often perfectly healed up and well, ſeveral Days before either the Convulſions, or their preceding Symptoms come on: And how ſuch a Cauſe, which has nothing acrid in its Nature, when the ſmall Inſtrument which made the Wound is removed, ſhould lay ſtill, and often without Pain, for ten Days or more, and then produce ſuch terrible Effects; at preſent only ſerves to ſhew us how imperfectly we are acquainted with the Structure and Nature of the Nerves and their contained Fluid, and how they act ſo as to produce their various and wonderful Effects; and alſo ſhews us how much a further Knowledge of them is wanting, and ought to be enquired into, and obtained if poſſible.

I think we may ſay, that all we know at preſent of this Matter, is, that we know by Obſervation, that theſe ſlight Cauſes, do actually produce thoſe terrible Effects. And that we alſo obſerve that the *Will* or *Thought*, which is not *Matter*, can act on the Body which is Matter, and give it Motion, *&c.* but how either of theſe act, ſo as to produce

their peculiar Effects, we know almoſt as little of the one, as we do of the other: Tho' there may be ſome more Probability of obtaining ſome farther Knowledge of the former, than we can hope for of the latter; and that if it ever be obtained, it muſt be by accurate Obſervation, and juſt inductive Reaſoning.

But till further Diſcoveries are made of the Nature and Action of the Nerves, we muſt be content with ſuch Obſervations as we have, and ſuch Reaſonings as we can juſtly draw from them, and endeavour to keep as near to Truth, as we poſſibly can.

We know then from Obſervation, that there is ſuch a thing as a Conſent of Parts, or that one Part of the Body being irritated or hurt, another Part of it will be affected in the ſame manner, though not hurt; as a Moat falling into one Eye, conſiderably affects both Eyes; and an Inflammation, or a Stone, in one Kidney, greatly affects them both, and the Stomach alſo, as it receives a Branch from the ſame Nerve; and the ſame is obſerved of ſome other Parts of the Body. We have an Account in the *Philoſophical Tranſactions*, by Dr. *Short**, of a ſmall ſharp Bone which cloſely adhered to a Branch of the crural Nerve, which being irritated by certain Motions of the Leg in which it was, it ſo irritated and affected the whole nervous

* Philoſ. Tranſact. Abridg. Vol. 7.

Syſtem, as to bring on ſtrong epileptic Fits, and greatly affect the whole Body with ſtrong convulſive Motions. And there ſeems to be a great Analogy between this Caſe, and what happens in this Diſeaſe, both as to the Cauſe, and the Cure; for that Bone being taken out, the Patient was freed from his epileptic Fits: and in this Caſe, the lacerated Nerve being entirely divided above the Wound, I have found it abate the convulſive Spaſms, and contribute much towards the Cure; wherefore I have made dividing the Nerve near to, and above the Wound, one of the firſt Intentions of Cure in this Diſeaſe, when it ariſes from a Puncture or Wound.

The Cauſes of this dreadful Diſeaſe, may be moſt properly divided into three, (tho' in ſome particular Caſes, there may ſometimes be ſome other concurring Cauſes) which are very different from each other: Firſt a ſmall Puncture or Wound in the Feet or Hands, or ſometimes in the Head, or in other Parts of the Body; tho' moſt commonly in the two firſt, which are moſt expoſed to ſuch Injuries, eſpecially in the Negroes who go barefoot, and thence are more ſubject to this Diſeaſe. Secondly, Catching cold ſuddenly, when very warm and ſweating with Exerciſe, Labour, or otherwiſe; and eſpecially if any Part of the Body, which is more nervous and ſenſible, was any way contuſed before: And, Thirdly, In young Children,

from

from a Retention and inſufficient Diſcharge of the Meconium, or from an acrid cheeſy Matter generated and retained in their tender Stomachs, or from any acrid, acid Humour which is retained in, and irritates their tender Bowels: For the *Inſultus Epilepticus* as uſual in Children in England, if it continues any time in this warm Climate, is frequently changed in them into a Tetany, and often proves fatal.

Theſe being the Cauſes of this Diſeaſe, the proper Intentions of Cure, evidently appear to be, Firſt, *To remove and take away the irritating Cauſe which affects the Nerves; and then to diminiſh and take off the Stimulation and Irritation of the Nerves.* And Secondly, *To relax the rigid Tenſeneſs and Contraction of the Nerves, Tendons, and Muſcles, of the Parts affected.* For the old Adage, *Tolle cauſam et ceſſabit effectum,* is as juſtly applicable in this, as it is in all other Caſes.

Wherefore, when we are firſt called, and find that either the *Opiſthotonos*, or *Tetany*, or their preſaging Symptoms, have ſeized the Patient, and that they proceed from ſuch a Puncture, or ſmall Wound, as before-mentioned, it is neceſſary to call in a *Surgeon* to examine the Puncture or Wound very carefully, that if any Part of the Splinter, Fiſh-bone, Needle, or Nail remain in the Wound, he may take it away. Then in

order to take off the Senſe of the Irritation of the wounded or lacerated Nerve, and prevent its being conveyed to the other Nerves, let the *Surgeon* make an Inciſion near to, and a little above the Puncture or Wound, ſo deep as totally to cut the lacerated Nerve in two, which conveys the Senſe of the Irritation from the Puncture or wounded Part; then dreſs both the Wounds with a mild Digeſtive mixed with a little Opium, to leſſen the Irritation and Pain more.

This being done, I generally give an Opiate, as, the following Bolus, Draught, or Pills as ſoon as I can, which moſt commonly takes off the nervous Spaſms, and greatly abates the convulſive Contractions and Tetany alſo. ℞ *Moſchi Oriental. gr.* xii. *Extracti Thebaici gr.* ii. *vel* iii. *Theriac. Androm.* ℈i. *Balſ. Peruv. q. ſ. Miſce, fi. Boluſ. ſtatim ſumend. Vel.* ℞ *Aq. Alex Simp.* ℥jſs. *Spir. Lavend. Comp.* ℥j. *Sp. C. C. ver. gut.* xxx. *Moſchi Orient. gr.* viii. *Extracti Thebaic. gr.* ij. *Balſ. Peruv. gut.* xx. *Syr. e Mecon.* ℥ſs. *M. fi. Hauſt. quam prim. ſumendus. Vel,* ℞ *Extract. Thebaic. gr.* ij. *vel* iij. *Moſchi Orient. gr.* x. *Balſ. Peruv. q. ſ. Miſce, fi. Pil.* iv. *ſtatim ſumend.*

And one of theſe muſt be repeated, every twelve, ten, eight, or ſix Hours, accordingly as the convulſive Spaſms are more or leſs violent and ſtrong, and return the oftener;

tener; and ſometimes I have found it neceſſary to repeat them oftener than every ſix Hours, where the Spaſms were very great, and returned very often, or where the Tetany was violent; neither need we fear any bad Conſequences to attend the giving ſuch large Doſes of the Opiates, or the repeating them ſo often, where the convulſive Spaſms are ſo violent, or return ſo frequently, tho' to Perſons who are not accuſtomed to take Opium in any Shape; nor have I ever ſeen that the giving ſuch large and frequent Doſes of the Opiates in this Caſe, have ever produced any Stupor, or great Diſpoſition to Sleep, tho' I have ordered ſixteen or twenty Grains of *Extr. Thebaic.* to be given in the Space of twenty-four Hours, where the Spaſms were violent, yet they ſeldom procured more than two or three Hours Sleep, and ſeldom more than one Hour at a Time without being awakened by the Spaſms, and rarely more than three Hours Sleep in the twenty-four Hours time, and that moſt commonly without any Stupor, or heavy ſleepy Diſpoſition; yet I have obſerved that the Opiates have always greatly abated the convulſive Spaſms, and the *Opiſthotonos* and *Tetany* alſo; and when they are given with *Muſk*, I think, that I have ſufficient Reaſons from Obſervation, to ſay that they both more effectually remove, and ſooner take off this much dreaded Diſeaſe. And as

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the convulsive Spasms abate and return less frequently, the Intervals between giving the Doses of *Musk* and *Opium* may be made longer, and longer, till the Spasms entirely cease, and the Patient can begin to move and help himself, and at last the Spasms entirely cease, when these Medicines may be entirely left off, tho' it will not be proper to leave them off entirely till then.

But in order to remove these painful Symptoms the sooner, and relax the rigid tense Contraction of the Nerves, Tendons, and Muscles of the Parts affected, it is necessary to foment the Præcordia, Jaws, Neck, and Spine, with an emollient relaxing Fomentation, four or five times a Day; and I have found that something of the following Nature has succeeded the best; ℞ *Fol. Altheæ vel Alceæ.* M. iv. *Salvæ, Flor. Sambuci, ana* M. ij. *Sem. Lini contus.* ℥ij. *Sapon. Venet.* ℥ij. *Sal Ammon. Crud.* ℥j. *M. Coq. in Aq. Cong.* j. *deinde adde Pisselii Barbadoens.* ℥iij. *in Spir. Sacchar. Com.* ℔ss. *Solut. Theriac. Androm.* ℥ij. *Misce, fi. Fotus, cum quo foveant Region. Præcord. Faucium et Spinæ Dorsi, tepidè ope Pannis laneis s. a. Sexta quaq; hora.* After which let the same Parts affected be anointed with the following Ointment, each time, and then be covered with Flannel.

℞ *Liniment. Saponac. Volatil. Nervin. Pissel Indic. ana* ℥j. *Balsam. Peruv.* ʒij. *Ol. Lavendul.*

vendul. Roriſmar. ana gut. xx. *Opii* ʒj. *Miſce, fi. Liniment. ut ſupra utend.*

Some have ſtrongly recommended the Uſe of the *Semicupium* in this Caſe; and I have known it uſed ſeveral times, and its Uſe ſeems to be both very reaſonable and promiſing; but I have always obſerved that the Patients have received more Benefit from the Uſe of emollient Fomentations and anointing the Parts affected, as above, than I ever could obſerve from the warm Bath; and I have more than once known the Patient die immediately after being taken out of the warm Bath, tho' the Bath was not made too warm, being only about ninety-five Degrees in *Fahrenheit*'s Scale, and they ſaid he had not ſtayed more than twenty Minutes in the Bath: for which Reaſons, I have conſtantly made uſe of the Fomentations and Liniment, and omitted Bathing, and I may add, with the deſired Succeſs in general.

In this Caſe the Pulſe is generally ſmall, languid and ſlow, only during the Continuance of the convulſive Spaſms, and a Minute after them, it is often ſmall, quick, and irregular, but ſoon becomes ſlow again, and the Patient is uſually rather cool than warm, eſpecially his extreme Parts, which are uſually cold, and often covered with a cold clammy Sweat; wherefore ſome warming cordial Medicines are neceſſary to

increaſe

increaſe and keep up the Momentum of the circulating Fluids; as a little ſoft warm Wine and Water given ſeveral times a Day, or ſomething of the following Nature when ſick or faint: As,

℞ *Aq. Menthæ Simp. Alexit. Simp. ana* ℥iv. *Vini Maderienſ. vel Canar.* ℥iiij. *Spir. Lavend. C.* ℥ſs. *Tinct. Caſt. Spir. Aromat. vol. ana* ʒij. *Syr. e Mecon.* ʒj. *Miſce, Dentur Cochl. duo vel tria in Spir. languorib.*

For it is neceſſary to ſupport the Patient with theſe, and the Uſe of a cordial vinous Diet, if they can get them ſwallowed, which in this Caſe is often done with Difficulty, as their Jaws are cloſe locked together, and ſwallowing even Liquids is very painful and difficult; as, Gruel with Wine, and Wine-whey made pretty ſtrong of the Wine; as it is abſolutely neceſſary in this Caſe, to keep up a moderate equal Warmth all over the Body, and a moderate warm breathing Sweat alſo, for I have always obſerved that where this can be done, and kept up, they generally recover; and where this equal Warmth and moderate Perſpiration cannot be obtained, but the extreme Parts remain cold, and covered with cold Sweats, they moſt commonly die.

In this Diſeaſe, the Sick are generally coſtive, which is generally rendered more ſo, by giving ſuch large and frequent Doſes of Opiates, yet without which they can nei-

neither live nor recover; wherefore an emollient relaxing Clyſter muſt be injected every other Day, or oftener if neceſſary. As,

℞ *Decoct. Emol. pro Clyſ.* ℥viij. *Elect. Lenitiv. Ol. Palmæ Chriſti, ana* ℥j. *Balſ. Peruv.* ʒj. *Piſſelii Indic.* ℥j. *Miſce, fi. Enema.*

But neither Purging, Bleeding, nor any other Evacuations are of any Service, but on the contrary are rather hurtful; except in a chance Caſe, where the Patient is of a plethoric Conſtitution, as I once ſaw one who was ſo, and had been treated with very hot Medicines, which had brought on ſome inflammatory Symptoms, with pleuretic Pains, and his Blood was become fizy by taking ſuch hot inflaming Medicines; but by bleeding him once, and the Uſe of antiphlogiſtic Medicines, with the Muſk and Opium at proper Intervals, the Fever and Inflammation were taken off, and the Convulſions alſo, and the Perſon ſoon recovered. But Bleeding in this Caſe, when from a Puncture as this was, ſhould be adviſed with great Caution and Judgment.

When the *Opiſthotonos* and *Tetany* proceed from taking Cold, as before-mentioned, the Patient is uſually ſeized with all the ſame Symptoms, as when they ariſe from a Puncture or Wound, and they uſually come on in the ſame manner, firſt a Pain in the Head with a Stiffneſs in the Jaws, which

which after ſome time become cloſe locked together and immoveable, then ſpaſmodic Contractions with acute Pain at the Scrobiculum Cordis, or where the Diaphragm, Mediaſtinum, Pleura, and Peritoneum meet and unite, theſe gradually extend to the Muſcles of the Neck, and the Spine, and ſo produce the *Opiſthotonos*, and laſtly to all the anterior as well as poſterior Muſcles, and thoſe of the whole Body, and produce a perfect *Tetany*, ſo that the *locked Jaw*, the *Opiſthotonos*, and the *Tetany*, may be ſaid to be the ſame Diſeaſe, only more or leſs extended, and the *Tetany* may be eſteemed only a greater and more univerſal extended Degree of the former. But I muſt obſerve that when this Diſeaſe proceeds from taking Cold, it generally comes on ſooner, viz. in three, four, or five Days after taking Cold, and ſometimes ſooner, even the next Night or Day; but when from a Puncture or Wound, it uſually comes on after the tenth Day, rarely ſooner, ſometimes not before the fourteenth Day. And tho' the Symptoms are the ſame, and uſually come on in the ſame manner in both Caſes; yet when it proceeds from taking Cold, they not only come on ſooner, but moſt commonly a ſmall Fever uſually begins to appear about the third or fourth Day after the locked Jaw has appeared, and in ſome, increaſes and appears with ſome

inflammatory Symptoms in a few Days more, which indicate and require Bleeding; tho' their Blood in this Caſe is generally more florid, yet I never ſaw it covered with an inflammatory ſizy Pellicle.

The Indications and Intentions of Cure are the ſame in this Caſe as they are in the preceding, when from a Puncture or Wound; excepting the Inciſion and what relates to the Wound, which cannot be neceſſary nor uſed here; as alſo are the ſame Methods and Medicines, as the *Muſk* and *Opiates*, fomenting and anointing the rigid and contracted Parts, as, the Præcordia, the Articulation of the Jaws, Neck, and Spina Dorſi, four or five times a Day, and the Uſe of all the other before-mentioned Medicines. But as this ariſes from catching Cold ſuddenly, by which the Perſpiration is obſtructed and diminiſhed, and the Quantity of the Fluids is increaſed, whereby more or leſs of a Fever is produced, which is moſt commonly attended with ſome inflammatory Symptoms, which render it neceſſary to take ſome Blood from the Patient, more or leſs, accordingly as the Symptoms indicate; and ſometimes to give ſome antiphlogiſtick Medicines, with the *Opiates* and *Muſk* as before.

This Method I have found to be the moſt ſucceſsful, and it generally anſwers our Expectations, when taken in time, and theſe Medicines

dicines are ſuitably given; but when they are too long deferred, it moſt commonly proves mortal, as well as the former: And when the Patient does recover, the Danger is uſually over in ſix or eight Days time; yet the Stiffneſs of his Neck and Back generally continues for two or three Weeks, and ſometimes longer, before it goes entirely off.

The *Opiſthotonos* and *Tetany*, which ſeize young Children in this warm Climate, ariſe from the ſame Cauſes, which uſually produce the *Inſultus Epilepticus*, or Convulſions, in them in England, viz. a Retention of the Meconium, or firſt Excrement after the Birth; or from a glutinous Matter which is too often found in the Inteſtines of young Children, ſoon after the other is diſcharged; or from a cheeſy Matter from the Coagulation of the Milk by an Acid in the Stomach; or from hard Excrements; or from ſomething taken in by the Mouth which is over acrid, or too hard to digeſt, which irritates their tender Bowels, and ſo produces Startings and convulſive Spaſms, with all the other Symptoms which precede and accompany Convulſions in young Children in England; and ſhews how much more readily and eaſily the Nerves are affected and irritated in that warm Climate, and the *Tetany* produced from a much leſs Cauſe there, than it is in England, where it is but ſeldom ſeen: But theſe Cauſes not being timely removed, their

their Acrimony is increaſed, partly by the Heat of the Climate, and partly by the Fever which they produce, which ſtill renders them more acrid, and ſo increaſes the Irritation of their Bowels, that it firſt brings on Startings, then convulſive Spaſms, and regular Convulſion-fits, which, if not ſoon removed, uſually end in a perfect *Tetany*, there, and is but ſeldom cured in ſuch young Children, when it arrives at that State: For when the Child lays in this miſerable, rigid, immoveable Condition, upon moving its Hands or Feet in the moſt gentle Manner, or ſoftly touching any Part of its Body, or giving it the leaſt Motion, even feeling its Pulſe in the moſt gentle, tender Manner, or the leaſt Noiſe, or even touching its Cloaths, will bring on the convulſive Spaſms, and cauſe it to be ſtrongly convulſed backwards, or drawn into a rigid ſtrait Line, ſtrongly extended and immoveable like a Statue, and will ſo remain immoveable out of either of thoſe Poſtures, for a conſiderable time, a Minute or two; and when the Diſeaſe is arrived at this Degree, I think it is never cured. But if the Phyſician is called in time, before the Tetany has ſeized the Child, (which is too ſeldom the Caſe there,) though he finds ſtrong convulſive Spaſms have ſeized the Child, or that it has had a convulſive Fit or two, provided that the Tetany is not come on, it may moſt

commonly be relieved, and the coming of the Tetany be prevented, and the Life of the Babe be ſaved; as I have more than once ſeen, by removing and carrying off the irritating Cauſe, which ſtimulates and irritates their tender Bowels, by ſuch gentle Evacuations as are ſuitable to their tender Age; and then quieting and compoſing the Irritation of their Nerves with ſuitable Anodynes, and correcting the remaining Acrimony of the nutricious Juices, in the *Primæ Viæ.*

To anſwer which Intentions, I have found the following Method, with Variations *pro re nata et pro ratione Ætatis,* as the Cauſe is different, to anſwer the deſired Effect the beſt. As,

℞ *Seri Lactis* ℥ij. *Sapon. Venet.* ℈j. *Mannæ Chalab.* ʒij. *vel* iij. *Ol. Amigd. Dul.* ℥ſs. *Fæniculi Dul. gut.* ij. *Balſ. Peruv. gut.* v. *Miſce, fi. Enema quam primum injicienda.*

And if the Symptoms of the approaching *Tetany* will permit, I uſually give ſomething of the following Nature to aſſiſt the Operation of the Clyſter, and to carry off the Acrimony the ſooner: ℞ *Aq. Sem. Fæniculi* ℥iij. *Magneſ. Albæ* ʒſs. *Ocul. Cancr. præp.* ʒj. *Syr. e Cichor. cum Rheo, Roſar. Solut. ana* ʒiij. *Miſce. Vel,* ℞ *Aq. Sem. Fæniculi* ℥iij. *Sapon. Amigdal.* ʒſs. *Magneſ. Albæ* ʒſs. *Syr. e Cichor. cum Rheo, Mannæ opt. ana* ʒij. *Ol. Amigd. Dul.* ʒiij. *Miſce, Exhibe Cochl. parv. vel duo pro ratione Ætatis omni ſemihora, vel omni hora, donec reſpond. Alvus.*

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Two or three Stools being obtained by theſe, I generally give ſomething of the following Nature, in order to abate the convulſive Twitchings, and prevent the *Tetany* from coming on; ℞ *Aq. Sem. Fæniculi* ʒiij. *Magneſ Albæ* ʒſs. *Ocul. Cancr. præp.* ʒj. *Moſchi Orient. gr.* iij. *Spir. C. C. ver. gut.* xv. *Syr. e Mecon.* ʒſs. *Miſce, Exhibe Cochl. Parv. (a Child's Spoonful dict.) ter quaterve de die, vel ſæpius, urgent. Convulſ. vel Spaſm.*

But if the Symptoms ſhew that the *Tetany* is more immediately coming on, ſo that we have not time to wait till the Operation of the Clyſter and opening Laxative be over, ſomething of the following Nature muſt be immediately given; or the *Tetany* will come on, and moſt commonly proves fatal to ſuch tender Babes.

℞ *Aq. Sem. Fæniculi* ʒiiij. *Moſchi orient. gr.* j. *Tinct. Thebaic. gut.* iiij. *Syr. e Mecon.* ʒij. *Miſce pro duobus Doſ. de quibus exhibe unam quam primum, et alter ſi Convul. Spaſm. redeunt.*

This may be thought a bold Attempt, to give *Tinct. Thebaica* to ſuch a tender young Infant; but as we are but too certain that it will die if the *Tetany* ſeize it, and that it will come on if this do not prevent it; and I have known a bold ignorant old Midwife give four or five Drops of that Tincture to a very young Infant without any Prejudice, more than its doſing three or four Hours, though

not in this Caſe, but in one much leſs violent; and we ought not to think it below us, to gather Good from Evil, or Knowledge from the Bold and Ignorant, when we can, for the Good of Mankind in any Caſe, as it is neither unbecoming a good Man, or a Philoſopher.

The Clyſter may be given at the ſame time, and the opening Laxative not long after it, though it may retard the Operation of that, for ſome time, yet it operates ſoon after, and gives Relief; after which the other Medicines, and fomenting the Body and anointing it, as before, may be uſed, if the Phyſician finds it neceſſary; alſo a little of the laxative Mixture may be given once or twice a Day, if the above Julep does not anſwer that Intention of keeping the Child's Body open for a few Days afterwards, which in this Caſe I have generally found it neceſſary to obſerve.

Theſe Methods and Medicines may be varied accordingly as the Cauſes of the Convulſions differ, and the other concomitant Circumſtances of the Patient may require, as the attending Phyſician ſees it neceſſary; for neither the ſame Method, nor ſame Medicines, will anſwer in all Caſes, though the Diſeaſe be the ſame, but they muſt be changed, as the Cauſes differ, or the Conſtitution of the Sick, or the Time of the Diſeaſe, or as ſome other Circumſtances may require; which is a thing of great Importance, not

only in this, but in the Cure of moſt other Diſeaſes; wherefore I mention it here, chiefly to caution the Practitioners in the Weſt-Indies.

And when proper Medicines are thus timely and judiciouſly given in this Caſe, they ſeldom fail to carry off the irritating Cauſe, and quieten and eaſe the Ne ves, and remove the Convulſions and Spaſms, and conſequently prevent the *Tetany*'s coming on, and the Death of the Patient.

But if calling in the Phyſician be deferred, till the *Tetany* has already ſtrongly ſeized the Child, as is too often the Caſe here, neither warm Bathing, Fomenting, nor theſe Methods and Medicines, nor any others whatever, as far as I have been able to obſerve, will remove it, or its Cauſes, nor ſave the Life of the little tender Patient.

Of the RABIES CANINA, or MADNESS *from the Bite of mad Animals.*

THOUGH this Diſeaſe is neither new, nor endemial or epidemical to Mankind; yet it is ſo frequently ſeen in moſt hot Countries, and eſpecially in the Weſt-India Iſlands, that it may be ſaid to be endemial to the Dog-kind, and their Bite infectious to Mankind; and as the Method of treating it, which is intended to be communicated here, has hitherto been found to be always

ſucceſsful, I hope it will be a ſufficient Apology for my troubling the World with it here now, after ſo many learned Authors in various Nations, have written ſo learnedly upon it.

The great Profeſſor *Boerhaave* has already treated ſo judiciouſly and learnedly on its Theory, that I have nothing new to add to it. *See his Aphoriſms*, §. 1128, *&c.* or *his* Lectures on them, taken in ſhort-hand, and publiſhed by the learned *Baron Van Suieten.* What I have to add here, chiefly relates to the *Prophylactic* and *Therapeutic* Methods of Cure.

The *Rabies Canina*, ſo called from the ſavage Madneſs, which is cauſed by the Bite of Mad-dogs, hence alſo called canine Madneſs; and from its moſt terrible Symptom of dreading Water, it is alſo called *Hydrophobia*, and by ſome *Hygrophobia.*

This Diſeaſe, tho' indigenous in warm Climates to the Dog-kind; always proceeds from a poiſonous Contagion taken into the Blood of Men, by the Wounds made by the Bite of ſome Animal which was mad before. As of Dogs, Wolves, Foxes, Cats, Apes, Horſes, Aſſes, Mules, Oxen, Sheep, Swine, or Fowls, which are mad; as alſo from Men labouring under this Diſeaſe, when they bite and wound thoſe who attend upon them. But it appears from Hiſtory, that Dogs, Foxes, and Wolves, (which are all of the Dog-kind)

are

are ſubject to this Diſeaſe from immediate internal Cauſes, without being bitten or infected by other Animals; which moſt commonly ariſes from the long continued great Heat of the Climate, and great Drineſs of the Country, a Want of Water, and being ill fed, or from their feeding upon putrid, fœtid, maggotty Meats, and ſometimes from Worms bred in the Kidneys, Inteſtines, and Brains, or high up in the Noſtrils of thoſe Animals *.

And as great Heats and Drineſs frequently continue long in theſe Iſlands, and are ſometimes attended with a Scarcity of Water, and that the Dogs are often much ſtarved and ill fed, and frequently get putrid and maggotty Fleſh of dead Animals, it is no wonder that thoſe poor creatures frequently run mad, and then bite other Dogs, and other Animals, as well as Men, which ſoon after become mad alſo; and thus this dreadful Diſeaſe is too often fatally propagated.

Wherefore I ſhall here carefully deſcribe the Symptoms or Signs, which generally ſeize thoſe Animals, eſpecially the Dogs, when they have been bitten, or are otherwiſe become mad, that their Owners may take proper care of, or deſtroy them, before they bite and infect others, and ſo propagate the Diſeaſe.

* See Bonet. Sepulcret. Anatom. de Rab. Can. Tom. i. Lib. 1.

Not long after theſe Animals, eſpecially the Dogs, have been bitten, by a mad Dog, they firſt begin to look dull and ſad, and endeavour to hide themſelves, or ſeek a Solitude in ſome dark or bye Place; ſeldom or never bark, yet will grumble and be angry with or fly at Strangers, but yet know and will fawn upon their Owners; they begin to refuſe their Meat and Drink, or juſt ſlightly taſte them; they droop and hang down their Ears and Tail, look very dull and ſleepy, and often lay down; this is the firſt Degree of the Diſeaſe, and their Bite now is dangerous, but not always infectious. Soon after this, they begin to breathe quick and heavily, than gape and ſhut out their Tongue, and diſcharge much Slaver and Froth from their Mouths, and looking as if half aſleep they ſuddenly fly at the By-ſtanders, then run forward, not in a ſtraight but in a crooked line; theſe Symptoms increaſe, and they begin not to know their Owner; their Eyes look exceeding dull and duſky, and much Water runs from their Eyes like Tears; their Tongue is of a Lead-colour, they grow weak and often fall down, then riſe and attempt to fly at ſomething, grow mad and furious: This is the ſecond and laſt Degree of the Diſeaſe, which ſeldom continues above thirty Hours before they die. Their Bite, during the ſecond State of the Diſeaſe, is commonly ſaid to be incurable, and the longer it has con-

continued, the more furious their Madneſs; and the nearer they are to their Death, the more dangerous and more fatal their Bite is, and the ſooner it produces its Symptoms and direful Effects.

Scarce any Poiſon known, is ſo infectious, or ſo eaſily and readily communicated by ſo many and various ways as this of a mad Dog is; for the ſlighteſt Bite, only tearing the Skin, without drawing Blood, or the ſmalleſt Quantity of the Slaver of the mad Animal, either freſh, or dried for ſome time, taken upon the Tongue or Lips*, or rending a Perſon's Cloaths and leaving the Slaver on them to dry, has produced this Diſeaſe; as a Woman † had her Coat torn by a mad Dog, which ſhe a conſiderable time after ſowed up, and bit off the Thread with her Teeth, and ſome time after died rabid from biting off that Thread. Alſo a Man only kiſſing his Children to take his leave of them, when he had the Rabies upon him, they all ſoon after died rabid ‡. Kiſſing a favourite Dog that was mad, had the ſame Effect; and a ſmall Wound received from a Sword which had killed a mad Dog a conſiderable long time before, has produced this moſt fatal Diſeaſe. Hence we ſee that we cannot be too

* Celius Aurelian. de Morb. acut. Lib. iii.

† F. Hildanus Obſ. Chirurg. Cent. i.

‡ Palmarius de Morb. Contagioſ. p. 266. Et Schenkii, Obſ. Med. p. 848.

too cautious in avoiding this infectious Poiſon; nor too careful in burning ſuch infected or torn Garments, or in carefully cleaning ſuch Knife, Sword, or Inſtruments as were uſed to kill ſuch mad Animals with; neither in uſing the utmoſt Care to avoid getting any the leaſt Particle of ſuch infectious Saliva into or near our Mouths, or on any excoriated or wounded Part of our Bodies, though ever ſo ſlight, and immediately to waſh them in ſalt Water and Vinegar.

However, we do not find from any Hiſtory, that this Poiſon infects us through the Skin *; but it may be prudent to waſh ſuch a Part with ſalt Water and Vinegar, to take all the Slaver off.

Neither do we know any Poiſon or Infection, which produces ſuch terrible Effects, in ſo ſhort a Space of time, as this has been known to do, and at other times to lay ſo long dormant or hid in the Body, without any Pain till it was brought into Action, and then produced its moſt dreadful Effects, as this Poiſon is ſaid to have done: for Hiſtory informs us, that ſome have been ſeized with its dreadful Symptoms in a very ſhort Time after they have been bitten †, others have continued well for twenty Years ‡, and then were

* Paul. Æginet. Lib. v. Ch. 3. Ætius, Tetrabit. Lib. vi. C. 24. Sauvages ſur la Rage, p. 5.

† Stalpart Vander Wiel Obſerv. Rarior. p. 413.

‡ Du Choicels de la Rage.

were ſeized with them, and died hydrophobous; and others again have been ſeized with it at all the intermediate Times between theſe ‖. Hence we ſee that this Poiſon ſometimes enters into Action very ſpeedily, and on the contrary that at other times it lies dormant many Years, and then proves ſuddenly deſtructive, when it is once rouſed into Action.

I ſhall firſt deſcribe the Symptoms of it, when it ſeizes Men. A Perſon in perfect Health, being infected with this canine Contagion, is ſooner or later ſeized with the following Symptoms, and in the following Order: Firſt, the Part which was wounded, or where the contagious Poiſon was firſt fixed or given, begins to be painful, then wandering Pains gradually ſpread round it, and ſo to other Parts of the Body; a Wearineſs, Heavineſs, and Inaptitude to Motion through all the Muſcles follows; their Sleep is diſturbed with frightful Dreams, accompanied with great Startings and convulſive Spaſms; great Reſtleſsneſs, and continual Toſſings of the Body, Sighing, Sorrowfulneſs, and a Deſire of Solitude; theſe Symptoms uſually attend the firſt Beginning of the Diſeaſe, and continue to the End of the firſt Stage of it: Blood being now taken from a Vein, has all the Signs of Health in it. This State continues

‖ Schmid. in Miſcel. Curioſ. Dec. 1. Ann. 9. p. 119.

tinues in ſome a longer, in others a ſhorter Time, and then they enter upon the ſecond Stage of the Diſeaſe, in which all the above Symptoms are increaſed, with the Addition of a violent Oppreſſion at the Præcordia, a great Difficulty of Breathing, with Sighing; great Horror and Dread of Mind; which is increaſed upon the Sight of Water or other Liquors, or the Face of a Looking-glaſs, as it reſembles Water, with great Tremors: A Loſs of Appetite, yet they generally can ſwallow ſoft, ſolid Food or Medicines; but touching any kind of Liquids gives them intolerable Anxiety, with great Tremors and Convulſions, and often throws them into raving Madneſs: They vomit a glutinous, brownish, bilious Matter, or a porraceous Bile; a Fever, with great inward Heat and Thirſt comes on, attended with continual Watchings, and ſometimes with a Priapiſm; very diſturbed and unuſual rambling Thoughts, and ſometimes Ravings; and thus continues and ends the ſecond Stage of the Diſeaſe. But after this, all the above-mentioned Symptoms are continually aggravated and increaſed, the Tongue becomes dry and rough, and is often thruſt out of the Mouth; the Voice becomes hoarſe, and the Thirſt almoſt inexpreſſibly great, yet cannot drink any thing, becauſe now on the Sight of, or attempting to touch any Liquor, they are ſtrongly convulſed and thrown

thrown into a raving Madneſs: A great Quantity of frothy Saliva is collected in their Mouths, which they cannot ſwallow, but endeavour to ſpit out upon the By-ſtanders, even againſt their Inclinations when they are more ſenſible; with a Deſire of biting thoſe they can come at, though often contrary to all the Force of their Will; they rage and foam at their Mouths; their Pulſe ſinks, and their Breathing fails; cold clammy Sweats come on; they are raving mad, yet have Intervals in which they are rational and ſpeak prudently, and are fearful of hurting others who are preſent. And thus moſt commonly, Death with a ſuffocating Breathing and Convulſions, puts an end to their then miſerable Life, within the fourth Day from the firſt Stage of the Diſeaſe.

Having thus plainly deſcribed this Diſeaſe, and its moſt remarkable Symptoms, by which it may be certainly known, both when it ſeizes Dogs, that they may be deſtroyed; and alſo when it ſeizes Men, when they have the Misfortune to be bitten by any mad Animal, and are ſeized with it, ſo that it may be known to be this dreadful Diſeaſe, and that they may apply to proper Aſſiſtance, before it be too late;

I ſhall not enter any farther into the Theory of this Diſeaſe, than is abſolutely neceſſary to explain my Reaſons for propoſing what I may hereafter recommend: As that is already

ready done by a more able Hand*. Neither ſhall I ſay any thing more relating to the Nature of this ſubtle and deleterious Poiſon, or its manner of acting, ſo as to produce its direful Effects; as ſo many able Phyſicians, both ancient *Greeks and Arabians*, and many learned Moderns, have ſo learnedly and judiciouſly treated on this Subject†. From which the Diagnoſis of this Diſeaſe may be certainly known, though the Prognoſis of its Conſequences and Effects are not ſo certainly known as we could wiſh them to be: ſince all the greateſt Profeſſors of our Art, have lamented, that even in its preſent improved State, it has ſcarce once furniſhed us with a certain *Prophylactic*, or real preventative Cure of thoſe who have been bitten by a real mad Animal; and affords us not one ſingle Inſtance of a Cure, that can be certainly relied upon, after the Dread of Liquors has appeared and ſeized thoſe Patients! as the great *Boerhaave* has judiciouſly obſerved; and adds, 'It is much to be lamented, that after ſo 'many Ages paſt have been thus deplora- 'bly ſenſible of the fruitleſs Inſufficiency in 'all

* In Profeſſ. *Boerhaave*'s Aphor. de Cog. et Cur. Morb. and in his Lectures publiſhed by the learned Baron *Van Swieten.*

† Boerhaave in locis cit. *Mead* on Poiſons. Tulpius Ob. Med. Salius Diverſus, Stalpart Van der Wielen, Sauvages, Philoſ. Tranſact. Memoir. de l'Acad. des Scienc. Miſcellan. Curioſ. Acta Phyſico-Medic. Curioſor. &c. &c.

'all their former known Methods, they 'ſhould ſtill neglect the Trial of new ones, 'different from thoſe of their Predeceſ-'ſors*.'

To ſay any thing on thoſe, or any other how much ſoever extolled Noſtrums, is unneceſſary; unleſs we can introduce ſomething that is new, and produce certain undeniable Inſtances of their Succeſs, ſo as that they may become uſeful to Mankind. I ſhall therefore, after deſcribing the State in which the Bodies of thoſe who died of this Diſeaſe, have been found upon Diſſection; and then relate the *Prophylactic Method of Cure*, which I have uſed, and found to be ſucceſsful, after the Perſons have been bitten by mad Animals, but before the Hydrophobia came on. And then ſay ſomething on the *Therapeutic* Method of Cure after thoſe fatal Symptoms are come on; and ſhall candidly relate ſuch Caſes as were very remarkable, and have fallen under my own Obſervation, with Fidelity.

From diſſecting Bodies who died of this Diſeaſe‡, we are informed, that the Organs of ſwallowing are uſually in an inflamed State; that a viſcid Glue-like bilious Matter is found in the Stomach; the Gall-bladder filled with black

* *Boerhaave*'s Lectures on his Aphoriſms, by the Baron *Van Swieten*, de Rab. Canin.

† Boerhaav. Aphoriſm. de Cog. &c. Bonet. Sepulcret. Anatom. Tom. I. Lib. 1. &c.

black Bile; the Pericardium quite dry; the Lungs incredibly ſtuffed up with Blood; the Heart filled with Blood, which is often found almoſt dry; the Arteries filled with Blood; the Veins almoſt empty; and their Blood very liquid, and will not coagulate in the Air, tho' it concreted but three Days before when taken from a Vein; all the Muſcles, Viſcera, Brain, Cerebellum, and the ſpinal Marrow, are found much drier than uſual.

From whence I beg leave to obſerve, that although an Inflammation of the Organs of Swallowing uſually, but not always, is found in ſuch dead Bodies; and that Inſpection into the Fauces and Throat, informs us, that an Inflammation of thoſe Parts is never found in the Beginning of the Diſeaſe, and very ſeldom, even ſome time after the Patient has been unable to ſwallow any Liquids, and in ſome, not even at the laſt; ſo that it is not an Inflammation and Swelling of the Parts that hinders their Swallowing, but the convulſive Spaſms of thoſe Parts.

Hence we conclude, that though the firſt Cauſe or Bite may be in the remoteſt Part of the Body, yet the contagious Poiſon, when it begins to act, and exerts its poiſonous Force, it chiefly affects the Nerves of the Gula, and the Muſcles employed in Deglutition, which it ſo greatly irritates, when they are moved, as to cauſe violent Spaſms and convulſive Contractions in them; from whence proceeds that Impoſ-

Impoſſibility of ſwallowing any Liquids whatever: And both that glutinous Matter in the Stomach, and the great Drineſs in the Blood, Heart, and other Parts above-mentioned, proceed principally from a want of a Supply of Liquids to dilute them, increaſed by the inward Heat, and continual Waſte of the Fluids, by Saliva, Urine, Perſpiration, and Sweat: and the Inflammation of the Gula and the Muſcles ſerving for Deglutition, which is found in ſome Patients, but not in all, ariſes from the want of that Supply of Liquids, and Drineſs of the Blood, and the frequent convulſive Spaſms of thoſe Parts: Hence we muſt conclude, that this Inflammation of thoſe Parts, is not the Cauſe of their Inability of Swallowing, but is the Effect of the above-mentioned Cauſes, and the often repeated convulſive Spaſm of thoſe Parts.

As all the Hiſtories of this Diſeaſe, give us ſo many dreadful Accounts of its moſt fatal Effects, we cannot be too careful and aſſiduous in uſing all prudent Methods to prevent them, when any Perſon has the Misfortune to be infected with its Poiſon; for I believe that no Man who has ſeen the dreadful Iſſue of this Diſeaſe, but would readily prefer a Maiming, if not the Loſs of a Limb, to ſave his Body from ſo calamitous a Death.

Wherefore, when any Perſon has the Misfortune to be bitten by a mad Animal, if a Surgeon or an Apothecary be near, it is undoubtedly

doubtedly the ſafeſt and moſt prudent Method, immediately to cut the bitten Part clean out, (if it be in ſuch a Part of the Body, that it can be ſafely done,) then apply a Cupping-glaſs over that Wound as ſoon as poſſible after, in order to ſuck out as much of the Poiſon with the Blood, as you poſſibly can; after which cauterize the Bottom and all the Sides of the Wound with an actual Cautery, and dreſs it with a proper Digeſtive; then waſh the Wound every Day with Salt-water and Vinegar, and keep it open with gentle Eſcaroticks for a conſiderable long time, that it may diſcharge as much of the Poiſon as poſſible. But if the Part bitten be ſuch that it cannot be ſafely cut out, let it be gently ſcarified near the Wound, then cupped and cauterized, and dreſſed, waſhed, and kept open as above, or cauterized without ſcarifying.

Alſo great Care ſhould be taken that the Garments of the Perſon, if torn, or the leaſt daubed with the Slaver of the mad Animal, be burned, and the reſt of it be carefully clean waſhed: Alſo that the Straw, Traſh, or Bedding, on which the Negroe laid, ſpit, or ſlavered, be burned; or the Traſh on which the mad Animal laid, ſlavered, or on which it was killed, be carefully burned, and the Place clean waſhed; and the Sword or Inſtrument with which it was killed, be carefully cleaned; for we have Inſtances of Cattle

tle eating ſuch Straw ſome Time after, on which the mad Animal had laid, and dying mad ſoon after, by eating that Straw.

This being done, (or where all theſe Operations have been neglected to be done) if the Patient be of a plethoric Conſtitution, and has loſt little Blood by Cupping; I uſually order ſome Blood to be taken from them, and if their Stomachs be foul, a Vomit to be given (if not, it is not neceſſary,) that Evening, and a Muſk Bolus of the following Nature after it when going to Bed; with Directions to encourage moderate Sweating that Night, by drinking ſmall Wine-whey warm after it.

℞ *Moſchi Orient. gr.* xvi. *Cinnabar. Nativ. levig.* ʒſs. *vel* ℈ii. *Pil. Saponac. gr.* viij. *Camphorii gr.* vi. *Balſ. Peruv. q. ſ. Miſce, fi. Bolus.*

And the next Morning I uſually give an antiphlogiſtic Purge, and in the Evening after, I moſt commonly order the Patient to bathe in the Sea, (or if that is at too great a Diſtance, in a cold Bath, or a River,) and either plunge himſelf, or be plunged by the Hands of another Perſon, quite over Head, and detained under the Water ſome time; and to repeat that two or three times, then come out and be rubbed dry, and go into Bed, and take the *Muſk Bolus* as above, and drink half a Pint of the Infuſion of *Rad. Valerian. Sylveſt. Cort. Saſſafræ*, and as much warm ſmall Wine-whey as he pleaſes after that, and encourage moderate Sweating all that Night; and to re-

peat the Bathing in the Sea, and the Muſk Bolus after it; as alſo the Infuſion and warm Whey every Night, for three or four Nights more ſucceſſively, with moderate Sweating each Night. And if the Animal which bit them, was in its laſt State of Madneſs, or was very rabid or raging when it bit them, I order them to repeat all the ſame, for ſix or ſeven Nights more ſucceſſively; and alſo to repeat all the ſame for three Nights at the next Full, and the next Change of the Moon following. For I have obſerved frequently, that ſeveral Perſons (though not all) who were bitten by mad Animals, were more diſordered, and were ſeized with a Heavineſs, Dulneſs, and a Love of Solitude, at the Full and Change of the Moon next following after their being bitten, tho' it went off, and they recovered by theſe Methods and Medicines, and they became perfectly well after.

I have alſo generally adviſed theſe Patients to go into the Sea or cold Bath, the laſt Morning after this Bathing and Sweating; then to rub themſelves dry, and put on their Cloaths without Sweating, and go about their Buſineſs or Pleaſure, in order to prevent their taking Cold, and bringing on a Fever, which might be of bad Conſequence at this time.

I am ſenſible that this prophylactic Method of Cure differs conſiderably, in ſeveral Reſpects, from that recommended by my much eſteemed and learned Maſter *Profeſ. Boer-*

Boerhaave; and alſo from that of ſeveral other learned Phyſicians, who have all recommended Bathing in the Sea, but to be performed with ſuch a buſtling and terrifying Apparatus, as to excite a Dread and Fear of Suffocation in the Patient; and the repeating thoſe Immerſions ſeveral times in order to increaſe that Terror, though he both threatens and ſupplicates the Performer to the contrary, as the Dutch Sailors have been taught, and uſually do. And both *They* * and that learned *Profeſſor*, ‡ tell us, that it generally was ſo ſucceſsful in effecting a Cure, that it *ſeldom failed*; and I remember that *He* in his Lectures on his Aphoriſms †, uſually gave us ſeveral Hiſtories of Caſes in which it was ſucceſsful; but he alſo gave us ſome in which it did not ſucceed, and they died hydrophobous afterwards.

But they ſeem to aſcribe too much to the Terror and Dread, which the Patient is put into by ſuch a frightful Apparatus; nor can I conceive how exciting ſuch a Dread can be of any Service, or any way contribute to the Cure in this Caſe, where the Dejection of their Spirits, and great Dread which always attends this Diſeaſe, are already too great before,

* Tulpii Obſerv. Med. L. 1. Cap. 20. p. 41. Stalpart Van der Wielen Cent. 1. Obſ. 100, &c. Dekkers Exercit. Pract. p. 564. ‡ Ridley Obſervat. de Aſthm. et Hydrophob. Ob. 25. † Vide Baron. Van Sweiten, in Aphor. H. Boerhaavi, Vol. IV.

without the Addition of ſuch a frightful Apparatus; unleſs it acts by cauſing them to ſweat more copiouſly after it.

But we can more rationally account for the producing a copious Sweating after cold Bathing, and its being of great Service in this Caſe: Since we know that cold Immerſion braces up, and gives a greater Spring to the Solids, and cauſes them to act with greater Force on their contained Fluids, and ſo increaſing their Momentum, which will not only attenuate them, but may contribute to comminute and break the morbid viſcid poiſonous Matter alſo, (eſpecially if they dilute plentifully, with ſuch a ſaponaceous Liquor as Whey is, at the ſame time); and all theſe Cauſes thus jointly acting, may probably greatly contribute to caſt the morbid Matter out of the Body by ſuch copious warm Sweats, as we frequently ſee are produced after cold Bathing, eſpecially when aſſiſted by the above Methods and Medicines. And I believe that it is from theſe Cauſes, thus acting, that cold Immerſions have been found to be of ſo much Service in the prophylactic Cure of this Diſeaſe; and I apprehend that if thoſe learned Gentlemen had been with their Patients when they bathed, and made their Obſervations with greater Acuracy, in reſpect to their ſweating more or leſs after it, they would have found that thoſe who had the moſt free continued warm, copious (not profuſe) Sweats, received

ceived the greateſt Benefit from it, and that thoſe who did not ſo, received the leaſt; becauſe I think that I have found it ſo, at leaſt in ſeveral Caſes, which have fallen under my own Obſervation; ſome of which I ſhall now relate.

A Gentlewoman's two Sons, her Houſekeeper, and ſeven Negroes, were all bitten by a mad Dog, in one Morning; a Month after which the Houſekeeper died hydrophobous: this alarmed the Family, and they ſent for me the next Day; her eldeſt Son, eighteen Years old, was of a ſanguine healthful Conſtitution; the younger had a weaker Conſtitution; they were both bitten in their Legs, tho' not very deep; but their Wounds were both healed up and cicatriſed two Weeks before I ſaw them, and they were ſeemingly well. They did not tell me that the Negroes were alſo bitten, not did I know it till afterwards.

The eldeſt Son being more plethoric, was bled, the younger was not, they were both purged the next Morning; then bathed in the Sea, being near it, and took the Muſk and Cinnabar Boluſes, as above, (the Younger had a little leſs Quantity of them both, he being but thirteen Years old) and encouraged moderate Sweating, &c. as directed. And five of the ſeven Negroes that were bitten by the ſame Dog, had the ſame Medicines given to them, as I had preſcribed for the el-

deſt Son, they being Men, and were treated in the ſame manner; and both her Sons, and all theſe five Negroes have continued to be very well, without having any Symptom of this Diſeaſe ever ſince, which is now ten Years ago. But the poor hired Negroes, neither had any Medicines or any thing done for them, unleſs they bathed, and both died rabid, about two Months after the Houſekeeper died.

Here three of the ten Perſons, who were all bitten by the ſame mad Dog, near the ſame time, and had no Aſſiſtance nor Medicines given to them, all died rabid and hydrophobous; and all the ſeven Perſons who took the Medicines and were treated as above, all remain free from any Symptoms of this Diſeaſe, and continue to enjoy Health. This is an Experiment which Humanity would forbid any Man to make; and if I had known the State of thoſe two Negroes, I would have procured them Medicines at my own Expence, but was not acquainted with their being bitten. However it ſerves to ſtrongly prove, and greatly confirm the Efficacy of this *prophylactic Method of Cure*.

Not long after this, a worthy Lady of great Merit had thirteen of her Negroes bitten by a mad Dog, who, by the beſt Account that I could obtain, was in the laſt Stage of his Madneſs when he bit them. They were all treated in the before-mentioned Method,

with Variations *pro ratione Ætatis*, &c. of the *Muſk* and *Cinnabar*, &c. and have all continued perfectly free from any Symptoms of this Diſeaſe, though it was ſeveral Years ſince. And I could mention ſeveral more, who had the Misfortune to be bitten by mad Dogs ſince, and by the ſame Methods and Medicines, have hitherto eſcaped entirely free from any Appearance of this Diſeaſe; neither have I ever yet ſeen any who purſued this Method regularly, that have ever had any Appearance of this Diſeaſe afterwards; which induces me to recommend this Method of *prophylactic Cure* to others.

I muſt further obſerve, that in moſt of the above-mentioned Patients, the Wounds made by the mad Dogs were healed up, and well, ſome time before any Applications were made; thoſe few whoſe Wounds were not healed up, had them waſhed twice a Day with Salt-water and Vinegar, and then dreſſed with a common Digeſtive till well. Neither did I make uſe of any *Mercury*, either internally or externally, but the Cinnabar, which is Ore of Mercury, tho' it has been ſtrongly recommended by ſeveral learned Phyſicians*, who have given us ſeveral Accounts of its good Succeſs, but generally when it was uſed with other Medicines at the ſame time. But the ſame learned Authors

* Deſault Diſſert. ſur la Rage. Sauvages Diſſ. ſur la Rage. Philoſ. Tranſactions.

thors alſo mention ſeveral Caſes, wherein Mercury was uſed very liberally both internally and externally; yet it did not ſucceed, but the Patients died rabid after; ſo that it does not by any means merit the Name of an infallible Antidote.

Neither durſt I wholly depend upon the Aſſertions of the *Chineſe*, tho' they ſay, that *Muſk* and *Cinnabar* is an infallible Remedy in this Caſe. Their Method of giving them is, *Moſchi gr.* xvj. *Cinnabar. Factitii, Nativi ana* ℈j. *Miſce, fi. Pulv.* which they give in a little Arrack, and if it does not cauſe the Patient to ſleep and ſweat, in three Hours time, they repeat the Doſe, which always procures Sleep, and a copious Sweat, as Sir *Gerge Cobb,* who firſt brought an Account of this Remedy from China, informed me, which was about the Time that the great *Boerhaave* died, and it is probable that *he* had not heard of, as *he* has ſaid nothing of it in this Caſe; but the learned *Baron Van Swieten* has added an Account of its Effects, to the Lectures on the *Rabies Canina* of that great *Author*, as alſo on *Mercury.* But the extraordinary Effects, which I had many times ſeen from giving *Muſk* in convulſive Caſes, and particularly in violent *Hiccoughs*, which are a convulſive Spaſm of the Æſophagus; and this Diſeaſe being attended with violent convulſive Spaſms of the ſuperior Parts of the Æſophagus and the Muſcles ſerving

ing for Deglutition, were greater Motives for my giving it, than the Recommendations of the *Chineſe*, becauſe as much has been ſaid of the Efficacy of ſeveral other Antidotes and Noſtrums. But I muſt add, that giving the *Muſk* has hitherto anſwered my Wiſhes and Expectations; and I cannot but aſcribe much more to the Virtues of the *Muſk* than to the *Cinnabar*, though it may probably contribute ſomething; but from what Obſervations I have made, the Muſk ſeems to do much more by its ſubtle Parts, both attenuating the circulating Fluids, and the poiſonous Matter alſo, and ſo carrying it out of the Body, by thoſe copious warm Sweats, which it uſually produces, eſpecially when it is aſſiſted by increaſing the Vis Vitæ and Momentum of the Fluids, by the previous cold Bathing, juſt before they take it, and go into Bed, to incourage that Sweating; and by repeating it four or five Nights ſucceſſively; and as I have found this Method ſo ſucceſsful, I cannot but recommend it to others.

Having ſaid thus much on the *prophylactic Method of Cure*, I ſhall now ſay ſomething on the *Therapeutic*, or the Method of Cure when the Symptoms of the Diſeaſe have already ſeized the Patient; and the ſooner the Cure is attempted, after the firſt Appearance of its Symptoms, in the firſt Stage, the better, and the more likely it is to prove

prove ſucceſsful, as the great *Boerhaave* juſtly obſerves*; 'Curatio verò morbi jam preſentis videtur tentanda, maximè in primo gradu; et in initio ſecund. (1138) imprimis quum aliter funeſtiſſimo exitu neglectus plectatur.—1. Statim poſt prima ſigna invadentis mali (1138) morbus tractandus, ut ſummus inflammatorius, mittendo ſanguinem ex lato vulnere magni vaſis ad animi deliquium uſque," &c.

But inaſmuch as the Hydrophobia ariſes firſt from the convulſive Spaſms of the Gula and Organs of ſwallowing, and not from an Inflammation of thoſe Parts; neither is it any Inflammation or Swelling in them, that hinders them from drinking Liquids, but the convulſive Spaſms of them, which being often and violently repeated, together with a Want of a Supply of diluting Liquors, that produces an Inflammation of thoſe Parts at the laſt; hence we diſcover that the Inflammation is the Effect, and not the Cauſe of the Hydrophobia. But as Bleeding may prevent the Inflammation's coming on, and abate thoſe Spaſms, it may be neceſſary in a moderate Degree; and when the Diſeaſe is further advanced, it is neceſſary in a much larger Quantity; and I have found it to be of very great Service. But I think ſtill that the principal Part of the Cure, depends upon the Effect

* Boerh. Aphoriſ. de Cog. et Cur. Morb. Aph. 1144.

Effect of the Antiſpaſmodics, eſpecially the *Muſk*, and their attenuating the morbid Matter, ſo as to fit it to be carried out of the Body by free copious Sweating, eſpecially in the prophylactic Cure, as alſo in the Beginning of the ſecond Stage of the Diſeaſe; which the following Caſes ſeem to confirm.

A young Gentleman near eighteen Years of Age, was bitten by a mad tame Fox, who was bitten by a mad Dog ſome time before; the Wound was four Inches above his Heel, and bled a little, but was healed up in two Weeks time. But the next following new Moon, he appeared to be very dull, heavy, and much dejected, but theſe went off in three or four Days time; but the next full Moon all theſe Symptoms returned in a greater Degree, joined with a ſtrong Deſire of Solitude; that Night he did not ſleep much, and that much diſturbed; his Father deſired him to riſe, which after ſome time he did, but put on his Cloaths, and hid himſelf in a dark Place under the Roof of the Houſe, and ſaid, he could not bear to ſee any Company, and was not willing to ſee me when I came there, though well acquainted with him, neither would he ſee any other Company; I went to him, and told him that he was not well, and deſired him to tell me how he was, and if the Fox had not bit him; he ſaid, yes; but there was nothing in that, the Place was well two Weeks ſince, and he well

well after that, but now he had an uneaſy Senſation and Weight at his Stomach and Breaſt, was greatly dejected he knew not why, and deſired to be alone; I then took him into a private Room, and found that he had all or moſt of the Symptoms of the firſt State of this Diſeaſe, (though he was naturally of a cheerful Diſpoſition) and found that his Diſorder ſolely aroſe from the Bite of the mad Fox, who had made his eſcape. I ordered ℥xviij. of Blood to be taken from him immediately, gave him a Vomit in the Evening, with which he drank Green-tea plentifully, and the following ſudorific Bolus at Bed-time, and warm Wine-whey after it, and encouraged a warm breathing Sweat all that Night; for the extraordinary Virtues of Muſk in this Caſe, were not known in England at that time, nor till ſome Years after.

℞ *Maſ. Pil. Saponac. gr.* x. *Sal. Succini vol. Camphorii ana gr.* viij. *Tartar. Regenerat. Theriac. Androm. ana* ℈j. *Ol. Saſſafræ gut.* ij. *Balſ. Peruv. q. ſ. Miſce, fi. Bolus.*

The next Morning he took an antiphlogiſtick Purge, which purged him pretty briſkly, and repeated the ſame Bolus the Night after it; he ſlept well and ſweated freely both theſe Nights, and was much better the next Day; he went to Scarborough the Day after, where he drank the cooling, nitrous, purging Waters of that Spaw every Morning, and bathed in the Sea every Night for five

or

or ſix Nights, and then every other Night for three Weeks more, and went to Bed after Bathing and took the above Bolus, and drank warm Whey, and encouraged moderate Sweating after it, and returned home perfectly well, and has continued ſo ever ſince, which is now above twenty-ſix Years ago.

A young Man about 20 Years of Age, was bitten by a mad Dog, and neglected to do any thing for it, and was at the full Moon following ſeized in the ſame Manner as the Gentleman above; theſe Symptoms alſo went off after three Days, but returned the next full Moon following, but conſiderably aggravated and increaſed: He then came to me; and finding his Caſe to be near the ſame as the other Gentleman's, except that the Load and Oppreſſion at his Stomach was leſs, and he had more Pain in his Head; I adviſed the ſame Method as above, except the Vomit, and repeated the Purge two or three times; as he did not go to Scarborough, he went into a cold Bath, and took a ſudorific Bolus, as above, and an Infuſion of Valerian and Saſſafras after it; and encouraged a free Perſpiration, with moderate Sweating after it, by drinking warm Whey after them every Night, for near two Weeks, and was then well: I ſaw him ſome Months after perfectly well, and have not ſeen or heard any thing from him ſince.

Theſe two Caſes were taken at the firſt Beginning of the Symptoms, in the firſt Stage of

of the Diſeaſe, before any Appearance of the Hydrophobia came on; and by this attenuating ſudorific Method, it and its dreadful Effects were prevented from ever coming on: but I muſt add, that I ſhould now prefer giving the Muſk and Cinnabar as above, from the many extraordinary Effects which I have ſince ſeen them have.

Three Years after this, I was called to a Barber's Wife above 20 Miles from me, but being pre-engaged to go ten Miles the contrary Way; and the Apothecary having deſcribed her Caſe and Conſtitution very well, I gave the following Directions, as I could not ſee her in time. She had a pretty good Conſtitution, though not robuſt and ſtrong; and was bitten by a mad Dog near three Months before: She was ſeized with the firſt Symptoms of this Diſeaſe, four or five Days before they ſent to me, which increaſed, and the Hydrophobia with the other Symptoms of the Rabies came on, the Day before they ſent for me; ſhe could neither drink, nor bear the Sight of any Liquors for ſome Hours before the Meſſenger ſet out on the Journey; and the Rabies was ſo great, that the Attendants had bound her Hands and Feet to the four Poſts of the Bed on which ſhe laid; ſo that the Hydrophobia had been upon her above thirty Hours, before the following Medicines were adminiſtred.

I or-

I ordered her to be bled *fere ad deliquium Animi*, and added to bleed her as long as they could, not to let her die away; then two Hours after, to plunge her into a large Tub of cold Water, and to immerge her quite over Head two or three times, and to detain her under the Water each time, as long as they could, not to drown her; then to take her out and rub her dry, and put her into Bed, and give her the following ſoft ſudorific Bolus, without offering her any Liquids with it, or for two Hours after it; which ſhe took and ſwallowed with a little Difficulty; for they can often ſwallow a ſoft ſolid Subſtance as Food, when they can neither bear to ſee, or take any Liquids.

℞ *Theriac. Androm.* ʒſs. *Pil. Saponac. Sal. Succini vol. ana* ℈ſs. *Camphorii Pulv. gr.* viij. *Ol. Menthæ gut.* i. *Syr. e Mecon. q. ſ. Miſce, fi. Bolus molli, ut ſupra ſumend.*

And three Hours after that, or ſooner, if the Opiate began to affect her, ſo that ſhe could bear the Sight of any Liquids, to give her a Draught of an Infuſion of *Rad. Valeriani*, *Cort. Saſſafræ*, with *Sal. Nitri*, *Sal. Diuretic.* ſweetened with a little Sugar, and as much warm ſmall Wine-whey after that, as often as ſhe would drink; which ſhe now took and drank with tolerable Eaſe: And in two Hours time after the firſt Draught, viz. about four or five Hours after the Bathing, having ſweated moſt of that Time, ſhe fell aſleep,

and ſlept four Hours, and ſweated freely all that Time, then awaked very ſenſible and calm; and as ſhe now could drink Liquids with eaſe, ſhe took a Draught of the above Infuſion every three Hours, and drank off the warm Whey very plentifully, and continued the warm breathing Sweat forty-eight Hours, as I had ordered, and repeated the Bolus three times in that time. An antiphlogiſtic Cathartic was given her the Morning following, which purged her well, and ſhe continued to dilute plentifully with Whey, and repeated the Bolus that Night after the Operation of the Purge; ſhe ſlept very well that Night and appeared to be very well the next Day, only ſhe was weak and low from ſuch large Evacuations; but that was ſoon relieved, and her Strength reſtored by a ſuitable cooling, diluting, and nutritious Diet, which ſhe took and perfectly recovered: And I ſaw her about ſeven Years after that, in perfect Health.

The firſt Steps towards this Cure were made by the large Bleeding, and giving the Opiate, which greatly contributed to take off the convulſive Spaſms, and ſo enabled the Patient to drink diluting Liquids copiouſly, whereby the almoſt dried circulating Fluids, were diluted and attenuated; and this being ſeconded by cold Immerſion, by which the Momentum of the Fluids muſt be increaſed and attenuated; which being aſſiſted by the volatile, attenuating, ſaponaceous Medicine,

and

and diluting plentifully with ſuch a ſaponaceous Liquor as Whey is know to be, muſt jointly contribute not only to attenuate the circulating Fluids, but the morbid poiſonous Matter alſo, and ſo carry it out of the Body by the long continued, free, warm Sweating, as was above adviſed. At leaſt theſe were my Reaſons for directing this Method of Cure, to which what the great *Boerhaave* has ſaid concerning Bleeding largely, and cold Bathing in this Caſe, was not the leaſt Motive to it: This however ſeems to be the moſt rational way of accounting for their effecting this extraordinary Cure, in ſo ſhort a time.

The extraordinary Effects of *Muſk* when given in large Doſes, in this and ſome other convulſive Spaſms, were not then known in England; and as I have always found the above *Prophylactic* Method of Cure ſo ſucceſsful, that I have not had an Opportunity of ſeeing any one Hydrophobus ſince the above Patient; otherwiſe I ſhould have given the *Muſk* with the *Opium*, *Sal. Succini & Camphor.* inſtead of the *Theriaca*, becauſe I think it is a much preferable, and every way a better Medicine in this Caſe.

And as *Muſk* is found by Experience, to be ſo effectual a Remedy, in the *Prophylactic* Cure of this Diſeaſe; have we not juſt Reaſons to hope for its being equally as ſucceſsful a Remedy in the *Therapeutic* Cure, if taken in proper time? eſpecially as it is now known

to be a more powerful and effectual antiſpaſmodic Medicine, than the above, or any other Medicines that we know, *Opium* only excepted; and as powerful an Attenuator and Sudorific as them, if not more ſo; does it not promiſe to be as ſucceſsful in the latter, as it is known to be in the former? And if we add *Muſk* to the *Opium* as above, after Bleeding largely, and cold Bathing, may we not hope that it may prove to be the *Antidote* againſt this ſingular Poiſon, which the great *Boerhaave* (and all good Men have) wiſhed for, when he ſays, *Aphoriſ.* 1146: "*Nec deſperandum tamen, ob exempla jam in aliis Venenis conſtantia, de inveniendo hujus ſingularis Veneni Antidoto ſingulari.*"

Of CHRONICAL DISEASES.

HAVING treated on ſuch *Acute Diſeaſes* in the preceding Part, as are either peculiar to, or endemial in the Weſt-India Iſlands, and ſuch Countries as are ſituated within the Torrid Zone, and are not ſo frequently ſeen in moſt Parts of Europe; I ſhall here ſpeak of ſuch *Chronical Diſeaſes* as are either indigenous or endemial, in the ſame warm Countries, and are unknown and never ſeen but in the hot Climates, except when they are carried by the Sick into the colder Countries.

And

And I ſhall begin with the Deſcription of a Diſeaſe, which I think I may ſafely ſay is new, and has never yet been deſcribed by any Author, neither Ancient nor Modern, not even by any of the *Arabian Phyſicians*; moſt of whom lived and practiſed in the hot Countries of *Perſia*, *Syria*, *Arabia*, and *Ægypt*; but of late Years is become endemial and frequent in Barbadoes, and the other Weſt-India Iſlands.

From the beſt Accounts that I can obtain, this Malady has been ſome chance time ſeen in this Iſland, near theſe thirty Years, though but very ſeldom; and after I came there in 1747, I did but ſee one Perſon who had it, in the firſt four Years of my reſiding there; and three more in the next three Years: But within the four laſt Years paſt, it is become ſo frequent, that I have ſeen ſome Scores of Patients labouring under it, yet it ſeems not to be in the leaſt infectious or contagious.

The Patient who labours under this Diſeaſe, uſually firſt complains of an uneaſy Senſation, or ſlight burning Heat about the Cardia, or upper Mouth of the Stomach; which comes ſlowly on, and gradually increaſes, and riſes up the *Oeſophagus* into the Mouth, without any Fever, or the leaſt feveriſh Heat, or much Pain attending it; moſt commonly without any obſervable Intemperance or Irregularity in living, or without any Surfeit, taking Cold, or any ſort of Fever or other

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Diſorder, which it can be attributed to, preceding it, or any manifeſt or immediate Cauſe, to which it can be aſcribed.

Soon after this burning Heat, little ſmall Puſtulæ, or Pimples, filled with a clear acrid Lymph, no bigger than a Pin's Head begin to riſe; generally firſt on the End and Sides of the Tongue, which gradually increaſe in Number, not in Magnitude, and ſlowly ſpread under the Tongue, and ſometimes to the Palate and Roof of the Mouth, and the Inſide of the Lips; and ſoon after the thin Skin which covers thoſe Puſtulæ, ſlips off, and the Tongue looks red and a little inflamed, though not ſwelled, yet is almoſt raw like a Piece of raw Fleſh, and is ſo tender and ſore, that the Patient can eat no Food but what is ſoft and ſmooth, nor drink any thing that is vinous, ſpirituous, or the leaſt pungent, without acute Pain; ſo that ſome ſuffer much from the want of proper Food. In ſome a Ptyaliſme comes on, and continues a long time, which is ſo far from being of any Service, or giving any Relief to the Patient, that on the contrary it drains and exhauſts the Fluids of the Body, and greatly waſtes and ſinks them.

In this State they continue ſeveral Days, or Weeks, and ſometimes for Months, ſometimes a little better, then worſe again; and after a conſiderable time, ſometimes longer, and ſometimes ſhorter, the Puſtulæ will diſappear and the Mouth grow well, without any Medi-

cines

cines or Applications, or any manifeſt Cauſe, and continue ſo for ſeveral Days or Weeks; but ſoon after this, the Patient finds a burning heat in the Oeſophagus and Stomach, attended with Ructuſes and ſometimes Vomitings, by which a clear acrid Lymph, or wateriſh Phlegm, which is very hot, and moſt commonly very acid, is brought up; though in ſome few it is not ſo acid: This generally continues but a little time before a Diarrhœa comes on, and continues a longer or ſhorter time in different Patients, and ſometimes for a longer or ſhorter time in the ſame Perſon, and in ſome it continues for many Weeks; and in all it greatly waſtes their Fleſh and Strength, and ſinks their Spirits very much. The Diarrhœa after continuing a longer or ſhorter Time, ſometimes ſtops without taking any Medicines, or doing any thing to ſtay it, and the Patient thinks himſelf better for a ſhort Time, and ſometimes for a longer Time; but in general the acrid Humour ſoon returns to the Mouth again, with all the ſame Symptoms, but ſomewhat increaſed or aggravated; and after ſome ſtay there, it removes from thence to the Stomach and Bowels again; and thus a Metaſtaſis of the Humour from the Mouth to the Bowels, and *vice verſa*, is frequently, and ſometimes ſuddenly made, without any manifeſt or perceptible Cauſe. Some chance time, though but ſeldom, after the Diſeaſe

has continued a long time, it affects all the *Primæ Viæ* from the Lips to the Anus at the ſame time, and excoriates the laſt; and I have obſerved in one or two Caſes, where the Puſtulæ appeared about the genital Parts, as we ſometimes find the Aphthæ do, as *Hippocrates* obſerves *; and in one or two Caſes I obſerved it to break out like an Impetigo, about the Mouth.

The Patients are all along without any Fever or feveriſh Heat, and their Pulſe is all this Time rather ſmaller, lower, ſlower, and more languid than it was when they were in full Health; and their Body and Countenance rather paler and ſomewhat colder, eſpecially in the extreme Parts, than when they were well: No Thirſt, except what the Diarrhœa cauſes, when it continues long, and that generally moderate. The Patient's Skin is generally dry, all the Time of the Diſeaſe, and he perſpires very little.

The frequent Metaſtaſes which this acrid Humour makes from the Mouth to the Stomach and Bowels, and from thoſe to the Mouth again, greatly emaciate, weaken and conſume the Patient. For when it is in the Mouth, both it and the Tongue are ſo excoriated, raw, tender and ſore, that they can take no Nouriſhment, but ſuch as is very ſoft, ſmooth and mild, and in a liquid Form, with-

* Hippoc. de Natur. Muliebr. C. 61. Epidem. Lib. 3, &c.

without giving them exquiſite Pain: and when it is in the Stomach, it gives a painful burning Senſation, and a frequent gulping up, or vomiting a little clear, acrid, acid Liquor, and their Food alſo; ſo that the Stomach can retain and digeſt nothing but what is very ſoft, ſmooth and light, and ſometimes not even that. And when the Humour falls upon the Inteſtines, it produces a Diarrhœa with a Senſe of Heat, and ſometimes a Griping, (tho' the laſt not often) and ſometimes with hot Stools and a Teneſmus; ſo that moſt of the nutricious Juices run off that Way, which greatly waſtes and ſinks the Patient. Theſe Circumſtances continuing, and the Diſeaſe frequently changing from place to place, almoſt continually deprives the Sick of their proper Nouriſhment, whence a true *Atrophy* is produced, which at the laſt, either ſinks the Patient, or brings on a *Maraſmus*, which ſoon ends in Death.

This is a true and I think an exact Deſcription of this Diſeaſe, and its Symptoms, which too often ſeizes ſeveral of the Inhabitants of Barbadoes, and I believe of the other Weſt-India Iſlands alſo, and has been too often fatal to ſeveral of them.

The Nature, Symptoms, and Appearance of this Diſeaſe, are conſiderably different from thoſe of the true *Aphthæ*, either of the Ancients or Moderns. The true *Aphthæ* generally are, either attended with a Fever, or im-

immediately follow a putrid Fever, an irregular intermitting Fever, a Dyſentery, a Diarhœa Febrilis, or ſome other Fever: This comes on gradually, ſlowly, and almoſt imperceptibly, and always without any Fever, either preceding or accompanying it. The *Aphthæ* are much larger Puſtules, and either ſuppurate and fill with a concocted Matter and form little Ulcuſculæ, or turn black and gangreneſce: Theſe are much ſmaller, and fill with a clear acrid Lymph, or Ichor, and then excoriate the Parts; but rarely or never fill with Matter, except here and there a chance Puſtula when the Diſeaſe has continued long; but never form Ulcuſculæ, nor gangreneſce. Theſe uſually ſeize People advanced in Years, rarely Youths, and never Children: The *Aphthæ* moſt frequently ſeize Children, rarely Youths, and ſometimes People in Years, but moſt commonly either with, or immediately after they had a Fever*: This is never with a Fever, but on the

* The great Profeſſ. *Boerhaave* ſays, that he ſaw two Women with ſmall Ulcers in their Mouths or Lips like the Aphthæ without a Fever; but he relates this as an uncommon Caſe. Was it not this Diſeaſe? And *Ketelaer* ſays, that he has ſeen the Aphthæ in ſome without a Fever. Were they not ſcorbutic Ulcuſculæ as it was in Zealand? *De Aphthis*, p. 26.

And the learned *Baron Van Swieten* ſays, that the Aphthæ are rarely or never ſeen in hot Countries. But he muſt have been wrong informed, for I have frequently ſeen them, eſpecially in Children, and alſo in ſeveral ancient

the contrary, they generally have a ſmall, low, and languid Pulſe, and are uſually colder than in Health. The *Aphthæ* are but of a ſhort Duration, and is an acute Diſeaſe, and uſually either kills the Patient, or they recover in two or three Weeks time, or leſs; but this Diſeaſe continues with ſhort Intervals of being a little better, then worſe again, for ſeveral Years, before it puts an end to Life; I am informed that it has continued for eight or nine Years in ſome Patients before it was fatal; though it has been ſo to ſome others in leſs than a Year, when they had lived too freely, or did not ſeek for proper Aſſiſtance.

It alſo differs conſiderably, and in many Reſpects, from an *Eryſipelas*, or an *Eryſipelatoides*; and alſo a little in ſome Reſpects from an *Impetigo*, though it is in ſome Reſpects moſt like that, and if it was external would probably produce ſcaly Scabs on the Skin after the Puſtulæ broke, as I once ſaw it about the Mouth.

As it is a new Diſeaſe, we muſt give it ſome Name; ſhall we call it an *Aphthoides Chronica*, or an *Impetigo Primarum Viarum?* or what? But I will not diſpute with any about its Name, as that is only a Diſpute about

ancient People in Barbadoes, which is in the Torrid Zone, Lat. 13. tho' they probably may not be ſo frequent there, as they may be in Zealand; but I never yet ſaw it, but with a Fever, or immediately after a Fever.

about Words; and if any Perſon will give it a better Name, I will readily agree with him, and thank him alſo.

As this Diſeaſe comes on ſo ſlowly, and increaſes gradually and almoſt imperceptibly, and continues with little or no Pain, except the Soreneſs of the Mouth, and ſometimes a little Griping in the Bowels, it is too often neglected, or trifled with, till it is far advanced; and even then, it is ſometimes difficult to convince the Patients that they are in any Danger from it, or to prevail on them to take ſuch Medicines as are neceſſary; ſo that it is too often neglected ſo long, that it is not in the Power of Medicines, or Art, to ſave their Lives.

Divers Means, and various Methods have been tried to cure this too often fatal Diſeaſe, in this unlearned Part of the World; but as they were generally immethodical, and without Succeſs, I ſhall not mention any of them here.

As I could not meet with any Deſcription, or the leaſt mention of this Diſeaſe, in any of the ancient *Greek or Arabian Phyſicians* Works that are come to our Hands, nor yet in any *modern Author*; I was obliged to get the beſt Knowledge of it that I could, by carefully obſerving its Symptoms, and examining what Functions of Life were either impaired, irregularly performed, or obſtructed; and from thence endeavour to diſcover the

the Nature, Cauſe, and Diatheſis of the Diſeaſe; and from thence to deduce the Intentions of Cure, and form the moſt rational Methods of Practice, to anſwer thoſe Intentions of Cure, that I could by Obſervation, inductive Reaſoning, and Analogy; and again to improve that by Obſervation and Experience: which Method I ſhall now communicate, and leave to others to improve, or find a better if they can.

As this Diſtemper generally comes imperceptibly on, and often without any apparent manifeſt Cauſe, it is difficult to diſcover what its true *procatartick Cauſe* is. But as it appears from the Nature, Symptoms, and Diatheſis of this Diſeaſe, that whatever will diminiſh the Strength of the *Vis Vitæ*, and leſſen the Momentum of the circulating Fluids, and at the ſame time diminiſh or obſtruct the Quantity of Matter which ought to be carried off by inſenſible Perſpiration and Sweat, may be the procatartick Cauſe of this Diſeaſe; and theſe Cauſes may be various and many; as too great a Delicacy and natural Weakneſs, or too great a Relaxation of the Solids; taking Cold, uſing wet Linen, damp Sheets, or too ſuddenly ſtopping or obſtructing the Perſpiration, in ſuch a weak relaxed Conſtitution; too often and over freely drinking vinous or ſpirituous Liquors; too great Anxiety, Diſtreſs, or Concern of Mind, Grief, &c. And ſeveral other Things

and

and Circumſtances, which are known to relax the Solids, and diminiſh the inſenſible Perſpiration at the ſame time.

It appears then from the ſmall low, weak Pulſe, and the languid Motion of the circulating Fluids, and no Fever, but a Coldneſs and Drineſs of the Skin, eſpecially of the extreme Parts of the Body, that there is a great Relaxation of the Solids, and conſequently a great Diminution of the *Vis Vitæ* and Momentum of the Fluids; the Coldneſs, Drineſs, and Roughneſs of the Patient's Skin, which uſually attends this Diſeaſe, ſhews an Obſtruction, and great want of Perſpiration and Sweat, which in this warm Climate generally are, and ſhould be conſiderably great in a State of Health. And the Excoriation and Soreneſs of the Mouth, Tongue, Gula Stomach, and Inteſtines, plainly demonſtrate, that an acrid Lymph, or ſharp Humour is turned upon thoſe Parts, and produces thoſe Effects. From whence it appears that a relaxed State of the Solids, a diminiſhed Momentum of the Fluids, an obſtructed Perſpiration, and an Acrimony of the Humours ariſing from thence, and increaſed by the Heat of the Climate, are the immediate concurring Cauſes of this Diſeaſe. For it is well known, that the perſpirable Matter, or any other excreted Fluid being obſtructed and returned upon any other excretory Veſſels, ſoon becomes acrid, and that it muſt ſtill be

rendered much more ſharp, by Retention and Heat of the Climate.

Theſe being the Cauſes of this Diſeaſe; we muſt take our Intentions of Cure from them, and they evidently appear to be theſe:

Firſt, *To cleanſe the Primæ Viæ, and open the perſpiratory Pores, and reſtore a free Perſpiration and Sweating.*

Secondly, *To correct and carry off the Acrimony of the Humours.*

Thirdly, *To ſtay the Purging, and ſtrengthen the Tone of the Stomach and Inteſtines, and aſſiſt Nature to expel the Humours from the internal Parts, to the Surface of the Body, that they may be properly carried off their natural way, by Perſpiration and Sweat.*

And laſtly, *To ſtrengthen the relaxed Solids, and increaſe the Momentum of the Fluids, and thereby contribute to reſtore and continue a free Perſpiration, and eſtabliſh Health.*

As the Humours are thus turned upon the Primæ Viæ, by the above-mentioned Cauſes, and have had their Afflux that Way for a conſiderable Time, as is commonly the Caſe, the Stomach and Bowels, are generally loaded with Phlegm, and are foul; wherefore an *Emetic* is firſt neceſſary, both to carry that off and cleanſe them, and render the other Medicines more effectual, as alſo to encourage Perſpiration: and here the *Rad. Ipocacuanha pulv.* is undoubtedly the beſt; and a Doſe of torrified Rhubarb with an *Opiate* and *Diaphoretic*

phoretic after it, is alſo a neceſſary. And if the Diarrhœa has continued ſome time; I have always found it neceſſary to give a ſmall Doſe of the *Ipocacuanha pulv. gr.* ij. *vel gr.* iij. about five o'Clock in the Evening, and a *Diaphoretic Opiate* after it has operated once or twice, at going to Bed, for ſix, eight, or ten Evenings, as the Diarrhœa has continued a longer or ſhorter Time before we begin. But if it be recent, and has not continued ſo long, a leſs Number of Doſes of the *Ipocacuanha*, viz. five or ſix, may be ſufficient, before the *Alteratives*, and *corroborating Diaphoretics* are given to anſwer the ſecond and third Intentions of Cure: for which I have found the following the moſt ſucceſsful, and therefore ſhall add the Preſcription, which the *Phyſician* may alter as he ſees it neceſſary *pro re nata.*

℞ *Sulph. Antimonii precipitat.* ʒv. *Mercurii calcinat. ſubtiliſ. levigat.* ℈j. *Gum. Guajac. pulv. Extr. Gentianæ ana* ʒj. *Camphorii* ℈ij. *Extract. Thebaic. gr.* x. *Balſ. Guajacin. q. ſ. Miſce, fi. Pil.* lx. *de quibus capiat Æger tres omni nocte hora decubit. inſuper bib. Infuſionis ſequentis* ℥ij. *vel* ℥iij.

℞ *Rad. Serpent. Virg. Cort. Saſſafræ Granator. ana* ʒj. *Cinnamoni* ʒij. *Sal. Abſinth.* ʒj. *Miſce, et infund. in vaſe clauſo, in Aq. Bull.* ℔ij ſs. *per hor. octo, et cola* ℔ij. *Colaturæ adde Vini Crocei* ʒj. *Spir. Mindereri* ʒiij. *Miſce, Sumat ut ſupra, Capiat etiam* ʒij. *omni Mane.*

Some-

Sometimes I have added *Vini Antimon. gut.* xx. *vel* xxx. to each Doſe of the Infuſion; and during the Time that the Patient takes theſe Medicines, I order his Body to be well rubbed half an Hour Nights and Mornings, with a Fleſh-bruſh, or a coarſe warm dry Flannel-cloth, in order to encourage a free Perſpiration; and uſe moderate Exerciſe on Horſeback, or in a Chaiſe if weak, to increaſe the Momentum of their Fluids, and invigorate their Solids: Let them alſo carefully avoid expoſing themſelves too ſuddenly to a cool Air, or the damp moiſt Air of the Night, or to damp Linen.

If the acid Humour affects the Stomach with a burning Heat and Pain, and ſour Belchings, as it often does in this Caſe, giving *Magneſia Alba* ʒj. in a Draught of Milk and Water ſweetened with a little Sugar, in the Morning, corrects the Acidity, and carries it off by a gentle Motion or two; and this may be repeated every third or fourth Morning, as the Acidity returns.

The corroborating diaphoretic Medicines, and this Method, ſhould be continued conſtantly, till you find that the Momentum of the circulating Fluids is ſufficiently invigorated, and the Patient has acquired a conſtant, regular, equal Warmth, without its being forced by Exerciſe, &c. And in order to obtain this deſired End, it is generally neceſſary to add a proper Chalybeat, as *Vinum*

Chalybeat. &c. and a little *Cortex Peruv.* to the before-mentioned warming and corroborating Medicines towards the latter End of the Cure, and to continue the Uſe of them, till they have recovered their Fleſh, Colour, and Strength, and are perfectly recovered; otherwiſe they are ſubject to relapſe, and the Diſeaſe return again.

But if the Diſeaſe has continued a long time before the Phyſician is called, as is too frequently the Caſe here, ſo that the Patient is much emaciated, and the Diarrhœa has made frequent Returns, and has continued long, and reduced the Sick low, it will be abſolutely neceſſary to repeat the ſmall Doſes of the *Ipocacuanha*, and the diaphoretic Opiate, ſeveral times, at any time of the Diſeaſe, eſpecially when the Diarrhœa returns, and ſtrong coroborating Sudorifics muſt be conſtantly given after, till the Diarrhœa is effectually ſtayed; and if this is not effected, a free Perſpiration cannot be reſtored, and continued, and without both, the Patient cannot perfectly recover. And as ſolid Medicines are often retained longer in the Stomach and Inteſtines, than Liquids uſually are, we often find that they will anſwer where the Liquid will not; wherefore when the Diſeaſe has proved very obſtinate, as the Diarrhœa too often does in this Caſe, after giving ten or twelve ſmall Doſes of the *Ipoca-*

Ipocacuanha as before, I have found the following Compoſition to anſwer beſt.

℞ *Electar. e Scordio* ʒj. *Theriac. Androm.* ʒſs. *Terræ Japon. Cort. Granator. Pulv. ana* ʒij. *Cinnamomi Pulv.* ʒj. *Sulph. Antimonii præcipit.* ℈ij. *Syr. e Mecon. q. ſ. Miſce, fi. Electar. cujus capiat Æger q. Nuc. Moſc. major. omni mane et hora decubitura, ſæpiuſve urgente Diarrhœa, ſuperbibendo Decoctionis ſequent.* ʒij.

℞ *Cort. Granator. Rad. Serpent. Virg. ana* ʒi. *Cort. Cinnam.* ʒij. *Miſce, coq. in Aq. Pur.* ℔ij. *ad* ℔iſs. *et ſub finem Coctionis adde Elect. e Scordio* ʒi. *coq. parum et cola, Colaturæ adde Aq. Cinnamomi, Tinct. Terræ Japon. ana* ʒi. *Syr. e Mecon.* ʒſs. *Miſce, fi. Decoct. ut ſupra ſumend. capiat etiam Cochl. quatuor poſt ſingul. Alvi deject. liquidam.*

The Frictions and Exerciſe of Riding ſhould be continued at the ſame time, and the other Precautions obſerved.

But if notwithſtanding the Uſe of all theſe Methods and Medicines, the Diarrhœa proves obſtinate, and returns, as it ſometimes happens; for I know no Diſeaſe that is more obſtinate, more ſubject to return, or more difficult to be cured, than this ſometimes proves to be: Therefore when this is the Caſe, and theſe Methods do not ſucceed, only for a time whilſt they take the Medicines, and the Diarrhœa continues to return, and the Patient's Skin is ſtill dry, ſo that he cannot be brought to perſpire freely as he ſhould do; warm-

Bathing, in ſome of the natural warm Baths, and corroborating Diaphoreticks at the ſame time, promiſe the beſt Succeſs. But it may be objected that warm Bathing relaxes the Solids, which are already too much relaxed before by the Diſeaſe; but ſeeing that if a free Perſpiration cannot be reſtored, the Diſtemper cannot be effectually cured, tho' they may ſeem to be better for ſome time, yet it will often return again; though I have known many that have recovered perfectly without warm Bathing, yet I have met with ſome who I apprehended could not, and found it to be ſo afterwards: For as I met with ſome Patients whoſe Situations were ſuch, that they could not go to any of the natural warm Baths; and as we had not any in the Iſland of Barbadoes, I ordered an artificial warm Bath to be made of common *Sal. Martis* (called green Copperas) *Sulphur Vivum*, and warm Water, made as warm as the warm Baths at Bath are, and added ſome Aromaticks, in which the Patients bathed, and were well rubbed whilſt in the Bath; but I found that it did not anſwer in ſeveral Reſpects, ſo well as the natural warm Baths did, therefore if the Patients can conveniently go to them, they are preferable; as they do not relax the Veſſels of the Body in general, (though they may relax thoſe on or near to the Surface of it, during the time they are in the Bath,) ſo much as the artificial Baths do, though they

are

are made but equally as warm; neither are thoſe who bathe in the natural Baths, ſo ſubject to take Cold after Bathing, as thoſe who bathe in the artificial Baths are, as I have ſeveral times obſerved; and it muſt be granted that the natural warm ſulphurous Baths, as thoſe of *Bath*, *Aix la Chapelle*, *Barage*, *Aix in Provence*, and thoſe in *Portugal*; and it is very probable that the warm Baths in *Jamaica*, *Nevis*, and *Carolina*, if they were properly examined by fit Experiments, would be found to be of the ſame Nature, and probably equally as good as the above-mentioned Baths are; all theſe natural Baths, greatly exceed all the artificial warm Baths that we can make: For whenever Nature acts the *Chemiſt*, ſhe far exceeds the greateſt Artiſt, and the ableſt *Chemiſt*. Beſides this, thoſe who go to thoſe natural warm Baths, have the Advantage of drinking their Waters daily, during the time of Bathing, whereby the acrid ſaline Humours may be attenuated, diluted, diſſolved, and at leaſt ſome of them carried off by Sweat and Urine: And what is ſtill of greater Importance, by drinking thoſe Waters, their Solids will be ſomewhat braced, and the Circulation of their Fluids increaſed, and conſequently a freer Perſpiration obtained, and continued. And though warm Bathing may be objected to, as it relaxes the Solids for a time, yet as it contributes to cleanſe the obſtructed Mouths of the perſpiratory Pores and

ſudorific Ducts, and gently relaxes the Coats of thoſe obſtructed Veſſels on the Surface of the Body, whilſt the Heat of the Bath increaſes the Momentum of the circulating Fluids, at the ſame time; they muſt by thus jointly acting together, more effectually remove the obſtructing Cauſe, and carry it out of the ſmall obſtructed Veſſels. Since relaxing the Coats of thoſe ſmall Veſſels will have the ſame Effect as increaſing their Diameters; and the Momentum of the Blood being increaſed by the Heat of the Bath, at the ſame time, muſt render it the moſt effectual Method to remove ſuch Obſtructions: And Nature may be aſſiſted in this Work, by giving a deobſtruent, diaphoretic Draught, half an Hour before the Patient goes into the Bath. I have found the following to anſwer this End the beſt; but it may be altered *pro re nata.*

℞ *Rad. Serpent. Virg.* ʒſs. *vel* ʒi. *Theriac. Androm.* ʒſs. *Miſce et infund. in Aq. pur. Bull. q. ſ. ut col.* ℥iſs. *Colaturæ adde Sal. Diuretic.* ϑi. *Spir. Mindereri* ʒiij. *Vini Crocei* ʒij. *Syr. Crocei* ʒij. *Miſce, ft. Hauſt. ut ſupra ſumend.*

Alſo rubbing the Patient's Body very well, both when he is in, and after he comes out of the Bath; and then going into a warm Bed, and encouraging a free Perſpiration, and moderate Sweating, by drinking warm Bath-water, will contribute much to the ſame Purpoſe;

poſe: And the corroborating diaphoretick Medicines before adviſed, may be continued with the Bath-waters, during the Intervals between the Times of going into the Bath, in order to brace up and ſtrengthen the internal relaxed weak Veſſels, and increaſe the Momentum of the Fluids, and enable Nature to caſt out the Humours from the internal Parts, to the Surface of the Body, that they may be carried off by Perſpiration in their natural Way. And though warm Bathing may a little relax the Veſſels on and near to the Surface of the Body, yet it does not affect the larger internal Veſſels, which are not expoſed to it, ſo much as is ſometimes apprehended, as I have often obſerved; but going into the Baths with too great a Plethora, or Fulneſs of the Veſſels, has undoubtedly done much Hurt, and has brought Bathing into ſome Diſcredit, and cauſed it to be much leſs uſed than it was formerly.

Theſe Remarks on Bathing and its Effects, eſpecially in this Diſeaſe, are not only plauſible in Theory, but I have found them to be true in fact; for I adviſed ſeveral Patients who laboured under this Diſeaſe, to come to Bath in Somerſetſhire, and to drink thoſe Waters, but they were not permitted to bathe in the Waters as I adviſed, though they drank them a conſiderable and ſufficient time, and no doubt took proper Medicines with them, yet they returned full as bad, and

ſome of them worſe than when they went; Wherefore I gave the next Patient that came to the Bath, full Directions both to drink the Waters and bathe in them, though he was more reduced and brought lower and weaker, than any of the others were, before he came: He accordingly drank the Waters five or ſix Weeks, and bathed twelve times in the Bath, and took the before-mentioned corroborating diaphoretick Medicines with them, after taking an Emetick and a Doſe of Rhubarb, and returned to the Iſland perfectly recovered, and grown ſtrong, fat, and jolly: And I could mention ſome others who have come thither ſince with the ſame Diſeaſe, and have uſed the ſame Methods, and received the ſame Advantage. As this is a new Diſeaſe, which I think has not been deſcribed before by any Author, nor probably been ſeen before in this Country; I mention this, that my Brethren the Phyſicians of Bath may adviſe ſuch Patients as labour under this Diſeaſe, and come thither to bathe, as well as to drink the Waters, if they think fit: *Sed Verbum ſat ſapienti.*

As to the Uſe of Gargariſms in this Caſe, they are but of little Service, except ſuch as are healing, when the Mouth is very ſore, as they only ſerve to repel the Humours from thence to the Stomach and Bowels, and to which they are but too often tranſlated, without any topical Applications; where they produce a Diarrhœa,

Diarrhœa, which is more difficult to be cured; when the ſtrongeſt Reſtringents without Diaphoreticks, will, at the beſt, only ſtop it for a little Time, and it will either upon taking a little Cold, or the leaſt irregular Accident, return again; wherefore I have found it neceſſary to adviſe the Patients, eſpecially when they did not come to Bath, and bathe, to uſe the reſtringent diaphoretick Medicines, at leaſt once or twice a Day, for ſome time after the Diarrhœa is totally ſtayed; in order to ſtrengthen the Tone of the Stomach and Bowels, as well as to invigorate the Momentum of the circulating Fluids, and reſtore and eſtabliſh a free Perſpiration; for which Purpoſes I have frequently, towards the latter End of the Cure, added ſome *Chalybeat*, in order to obtain thoſe deſired Effects; for without ſtrengthening the Solids, and reſtoring a briſker Circulation of the Fluids, and a free Perſpiration, I cannot ſay that I ever yet have known any one perfectly recovered; though by theſe being reſtored, I have known many reſtored to Health.

Of the NYCTALOPIA, *or* NIGHT-BLINDNESS.

THE Nyctalopia is a Diſeaſe which is ſo frequently ſeen among the Negroes in this warm Part of the Globe, and as I am informed in Africa alſo, that it may be juſtly deemed

deemed an indigenous or endemial Diſeaſe in the Torrid Zone; though it is but very ſeldom ſeen in England, or in the other Parts of Europe.

The great *Hippocrates*, and moſt of the other *Greek* Phyſicians, as alſo the Arabians, have deſcribed this Diſeaſe very well; though their Commentators and Interpreters * ſeem to have made ſome Miſtake and confounded it with the *Hemeralopes*, which probably aroſe from their having ſeldom or never ſeen it in Europe: But *Galen*, the beſt Interpreter of ſome difficult Paſſages in *Hippocrates*, calls it Νυκταλωπες †, Nyctalopes, a Night-blindneſs; and *Ætius*, ‖ who lived at *Amida* in *Meſopotamia*, now a Part of *Perſia*, a hotter Country than *Greece*, probably might ſee it oftener, deſcribes it clearly, and the Ημεραλωπες, Hemeralopea or Day-blindneſs alſo, i. e. thoſe who cannot ſee in the Day time, but ſee well by Night; likewiſe both *Paulus Ægineta* ‡ and *Actuarius* ** deſcribe it well. Among the Latins *Pliny* †† alſo mentions it, and the elegant *Celſus* calls it *Imbecillitas oculorum* ‖‖, *ex quo quidem interdiu ſatis, noctu nihil cernunt*, they ſee well by Day, but in the Night nothing, or are blind.

This

* Foeſius in Œconom. Hippocrat. † Galenus in Œconom. Hippocr. p. 264. ‖ Ætius Tetrabill. II. Serm. 2. C. 46. ‡ Paul. Ægineta, Lib. III. Cap. 22. ** Actuarius Meth. Med. L. II. C. 7. †† Pliny Hiſt. Nat. VIII. C. 50. ‖‖ Celſus, Lib. VI. Cap. 6.

This is a Diſeaſe which is now frequently ſeen among the Negroes in the Weſt-India Iſlands, and I have ſeen many; and an ingenious Apothecary there, told me that he had known ſix, eight, ten, or twelve Negroes ſeized with it in ſome Eſtates, when the Night came on, ſo that the other Negroes who could ſee well were obliged to lead them home, tho' they could ſee well in the Day-time to do any Work, ſo long as the Sun was above the Horizon; but as ſoon as the Sun was gone down, their Sight began to grow dim; and as the Darkneſs of the Night approached, that Dimneſs increaſed, and they became perfectly dark and blind; and that Blindneſs continued till the Morning, that the Sun began to riſe, with which their Sight returned alſo, and continued till Night, when they became blind again; and thus they continue to be blind in the Nights, and to ſee in the Days, for a long Time, if not relieved by proper Remedies: ſometimes ſome of them will recover their Sight for ſeveral Nights, and then loſe it again, and that for ſeveral times.

I could not obſerve that the Variations of the Weather had any Influence or Effect on this Diſeaſe, either in producing, increaſing, or abating it; unleſs a continued clear, dry, hot, Seaſon had ſome little Effect on them.

This Night-blindneſs comes on in the Evenings, after the Sun ſets, with a miſty Dim-

Dimneſs, which gradually increaſes as the Night approaches, till it becomes dark, when their Sight becomes perfectly dark alſo; and without any Pain, either in the Head or Eyes, or elſewhere; ſometimes a Senſe of Fulneſs in the Head, and a ſmall Tinitus Aurium attends it, at other times not, but without any Vertigo or Giddineſs; no Oppreſſion or Sickneſs at the Stomach, or Loſs of Appetite, neither any other Complaint but the Loſs of Sight; all the Secretions and other Functions of Life ſeem to be regularly performed; neither do their Eyes appear to be impaired or altered, the Cornea and Pupil appear perfectly clear and well, and the Iris alſo, which continues to contract a little in the Day-time, and dilate as uſual in the Night, yet no Viſion is then performed; neither does there appear to be any Afflux of Humours to, or any Signs of Inflammation in the Eyes.

As no external Injury or impediment in the Eye appears, its Cauſe muſt be internal; and as no Pain or Inflammation, or any Signs of it, attends it, it does not proceed from any Obſtruction of the ſanguiferous, ſeriferous, or lymphatic Veſſels; therefore it muſt ariſe from ſome male Affection of the Retina or optic Nerves, or both: And as this is a Diſeaſe which is the moſt frequent within the Torrid Zone, where the Reflections of the Rays of Light are ſtrong and vigorous, and the Sun being ſeveral Hours every

every Day almoſt perpendicular over them, the Angle of Reflection is very acute, and the Rays of Light muſt be ſtrongly reflected from the Earth and other Bodies into the Eyes, conſequently the Senſation of them, and the Vibrations of the Retina and optic Nerves muſt be great alſo; and being thus accuſtomed to ſuch continued ſtrong Vibrations, they become weakened, and their Tone greatly impaired*, ſo that they become inſenſible of the ſmall weak Vibrations of the few inactive Rays of Light which exiſt in the Night, and move with almoſt an infinite leſs Force than thoſe of the Day, there; and when this happens to ſuch Eyes as have a natural Imbecillity in the Formation of their Nerves, which by the ſtrong continued Vibrations of the Light of the Day there, become in ſome degree paralitic, and inſenſible of the ſmall weak Vibrations of the little Quantity of Light of the Night, ſo that they perceive no Light, and remain blind till the Sun returns in the Morning, and renews the ſtronger Vibrations of Light again, and they ſee.

This ſeems to be the Cauſe of this Diſeaſe, and this the moſt rational and ſatisfactory Way

* A Gentleman by riding ten Miles on the Sea-ſhore near Noon, had his Eyes ſo weakened by the ſtrong reflected Rays of Light from the white Sand, that he could not ſee ſo well to read by Candle-light in the Night for four or five Weeks after, as he did before and after that. And we ſee ſomething like it in thoſe who are Snow-blind, and cannot ſee for ſome time after they come into a Houſe, tho' it be Day-light.

Way of accounting for it; and as it plainly and clearly accounts for all its Symptoms and Appearances in a plain, ſimple Manner, it appears to be true.

The Ημεραλωπες, Hemeralopia is a Diſeaſe which is very ſeldom ſeen; they ſee pretty well in the Night, but very little in the Day, and cannot ſee any thing when the Sun ſhines bright. It proceeds from a different and direct contrary Cauſe of the other, viz. from too great a Tenderneſs and Senſibility of the Iris and Retina, for they cannot bear any Degree of Light from the Sun to fall upon their Eyes, but are obliged to ſhut their Eye-lids cloſe, and ſo near cloſed from the Light of the Day when the Sun does not ſhine out, as not to be able to ſee, as we ſometimes ſee in an Inflammation of the Iris or Retina, tho' no Inflammation is preſent here, but too great a Senſibility of thoſe Parts, ſo that they cannot bear the Light of the Day, but can dilate the Pupil of the Eye, and ſee very well in the Night: I have but had an Opportunity of ſeeing two Perſons who laboured under this Diſeaſe*. The

* When I was at the School, I ſaw a Man who was blind in the Day-time, and laid Wagers with Men who could ſee, to run Races with them in dark Nights; and got his Wagers, till they found that he could ſee in the Night, though not in the Day.

It is ſaid that there are a People in Siam, in the Eaſt-Indies, and alſo in Africa, who are all ſubject to this Diſeaſe of being blind in the Day-time and ſeeing well by Night. Modern Univerſ. Hiſtory, Vol. VII.

The Methods of Cure which have been uſed in the *Nyctalopea*, are various, and little has been ſaid of the Cure of the *Hemeralopea*, as it is ſo very ſeldom ſeen. That recommended by *Paulus Ægineta* *, in the Cure of the firſt, is judicious and rational, tho' his Method of Diet, and external Applications, may be as well omitted, as there is no external Fault in the Eyes, and his external Applications are of too groſs a Nature to penetrate much into the Globe of the Eye. Some from its periodical returning with the Darkneſs of the Night have ſuppoſed it to be of the intermitting kind, and therefore thought it ſhould be treated as ſuch; but its periodical Returns, are ſolely owing to the periodical Returns of the Darkneſs of the Night, and not to any thing in the Diatheſis of the Diſeaſe; and the *Cortex Peruv.* may be of much greater Prejudice to the Patient's Conſtitution in ſome other Reſpects, eſpecially as we find that the Methods which increaſe and are prejudicial in intermitting Fevers, greatly contribute to the Cure of this Diſeaſe. For as Paul Ægineta † adviſes, we find by Experience that Bleeding once, to a greater or leſs Quantity, as the Patient is more or leſs plethoric, and purging them twice or three times with an antiphlogiſtick attenuating Cathartic, and giving the *Rad. Valerian. Sylv. Pulv.*

* *Paulus Ægineta*, Lib. III. Cap. 22.
† Idem ibid.

Pulv. with its *volatile Tincture* two or three times a Day, in the intermediate Days, and for two or three Days after the laſt Purge, generally removes the Diſeaſe and reſtores the Patient his perfect Sight.

I have ſometimes ordered their Eyes to be waſhed with the following, and I think with Advantage; ℞ *Aq. Roſar.* ℥iſs. *Vini Antimonial.* ℥ſs. *Miſce, ſi. Collyr. cum quo lavat. Oculos omni Nocte hora decubit. et etiam Mane.* And it is probable that the ſubtile Particles of the Antimony may penetrate the Eye, and be of Service in this Caſe; and not improbably in the *Hemeralopea* alſo, but I have never had an Opportunity of trying it.

Of the ELEPHANTIASIS.

THE Elephantiaſis is alſo a Diſeaſe which is either indigenous or endemial to ſuch Countries as are within the torrid Zone.

This Diſeaſe was well deſcribed by *Abubeter Mohamed Rhazis**, who lived in *Perſia*, about 850 Years ſince; and he does not ſpeak of it as a Diſtemper that was new in his time; therefore we may conclude, that it was well known in Perſia, Arabia, Egypt, and the other Parts of Africa alſo, as *Lucretius* mentioned it many Ages before that Time, as a Diſeaſe of that Quarter of the World. However we are certain that the Negroes firſt brought

* Rhazis ad Manzor. Diviſon. Lib. Cap. 107. p. 418.

brought it from *Africa* to the Weſt-Indies, where it is now but too frequent among them, and among the white People alſo, who are not exempted from it.

But I cannot think with Dr. *Town**, that this Diſeaſe has any Affinity to the *Lepra Arabum*, tho' ſeveral of the *Arabian Phyſicians*, or rather their Tranſlators, have called the true *Lepra Arabum* by the Name of *Elephantia*; but *Rhazis* diſtinguiſhes them clearly; and how the other *Arabians* ſince him, and the *European Phyſicians* ſince them again, have confounded their Names, is difficult to determine.

However it is much to be wiſhed, that the Arabians, who are the firſt Phyſicians that have mentioned this Diſeaſe, had more fully deſcribed its firſt Symptoms and Appearance, and the manner of its coming on, and increaſing to its full State, more accurately and clearly, than they or any ſince them have; which Defect, I will endeavour to ſupply as well as I can, from repeated Obſervations.

The Patient when apparently in perfect Health, and without any preceding procatartic Cauſe that he knows of, is firſt ſeized with a cold Rigor, like the Fit of an Ague, which continues one, two, or three Hours, with acute Pain in the Head and Back, a Sickneſs at his Stomach, and ſometimes a Vomit-

* Dr. *Town* on the Diſeaſes of the Weſt-Indies, p. 184.

Vomiting, and great Pain in one of the *inguinal Glands*, ſometimes in one, in others in the other inguinal Gland, never in both, and whether it falls on the Right or Left-gland the firſt Time, it generally continues to fall on the ſame Gland every Fit afterwards: the Rigor is ſucceeded by a very hot Fever, which uſually continues twenty, thirty, or forty-eight Hours, and ſometimes longer; the Patient is often delirious, the Pain in the inguinal Gland increaſes, and it ſwells and becomes red and hard, rarely or never ſuppurates: ſoon after it is thus ſwelled, a red Stroke runs down the Thigh from the tumified Gland, to the Leg, almoſt an Inch broad, and of a freſh red Colour; the Leg begins to ſwell, and is much inflamed, and as that Inflammation increaſes, the Fever abates, and at laſt goes quite off, moſt commonly in four or five Days time; ſometimes ſooner, at other times later; and in this time the tumefied Gland ſubſides and comes to its natural State. The morbid Matter being thus caſt upon the Leg by this imperfect Criſis, it continues to be much inflamed and ſwelled for ſeveral Days, and then goes gradually quite off; and the Patient ſeems to be perfectly well again. The Fever makes frequent Returns with all the ſame Symptoms, and in the ſame manner, but at no certain periodical times; ſometimes twice, thrice, or four times in a Year, eſpecially in the firſt two or three Years of the Diſ-

Diſeaſe; in others, once a Month or three Weeks, or oftener; the moſt frequent Returns that I have ever ſeen in any Patient, was four times in eleven Days, but then at no certain Periods; it will come ſometimes at two or three Weeks end, and the next time not till three, four, or ſix Months after, but whenever it returns, the morbid Matter is each time thrown upon the ſame Leg, on which it chanced to fall the firſt time.

The Leg moſt commonly remains longer ſwelled after each Return of the Fever, than it did in the former Fit; and after ſeveral Returns, it continues to remain ſwelled, after the Inflammation is entirely gone off; and now it begins to appear oedematous, or as if it was anaſarcous, but that the Swelling does not retain the Impreſſion of the Finger ſo much, or ſo long, as it will in a dropſical Caſe.

By theſe frequent Returns of the Fever, the Leg is each time more and more tumefied, and the ſanguiferous Veſſels are diſtended, the Veins become varicoſe, and the Swelling increaſes down from the Knee to the Extremities of the Toes; the Skin of that Leg begins to grow rough and rugged; the Swelling ſtill increaſes, and the Membrana Celluloſa becomes very thick, hard, callous or ſemicartilaginous in ſome Places; the Skin grows thicker and ſcaly, with great Fiſſures and Chops upon its Surface; theſe ſeeming Scales do not dry up and fall off, but adhere faſt, and are daily increaſed and protruded by the

increaſing Thickneſs of the Membrana Cellulosa; and the Leg and Foot are thus continually enlarged to an enormous Bulk, when in Size, Shape, and all other external Appearance it exactly reſembles the Leg of an Elephant, from whence the Diſeaſe takes its Name.

The Patient continues in this Condition many Years, ſome have lived above twenty Years, with a Leg of this monſtrous Magnitude, and their Appetite and Digeſtion good, except in the Times when the Fever returned; and all their Secretions and Functions of Life have been (at all other times) regularly performed, and they appeared as if in Health, without being ſenſible of any other Inconveniency of Life, but that of carrying along with them ſuch a troubleſome Load of Leg. This Diſeaſe and Bulk of Leg is generally confined to one of them, though it is ſaid that there are ſome very few Inſtances, where it has affected both at the ſame time; but I never yet ſaw one that was ſo.

I had an Opportunity of ſeeing one of theſe Legs, of the largeſt Size, amputated, and afterwards, at my Requeſt, diſſected by Mr. *Hickes*, an ingenious Surgeon in the Navy. We found the rough, ſcaly Skin very thick, its ſmall blood Veſſels much enlarged; the Membrana Adipoſa was exceeding thick, (though the reſt of his Body was lean and thin) in the Ancle it cut full two Inches

Inches thick, in other Parts of the Leg an Inch and half or more; when cut it looked clear, like the Fat of a Hog, or rather like ſalted Pork; the Cellulæ of this Membrane were greatly diſtended, and filled with an oily, fat, gelatinous Subſtance; about the Ancle and upon the metatarſal Bones it was become ſemicartilaginous, and cut with a grating Noiſe. The Coats of both the Veins and Arteries were alſo very conſiderably enlarged, ſo that ſuch as were naturally very ſmall Branches of the Artery, were here pretty large Veſſels, inſomuch, that when he amputated the Leg, he was obliged to take up no fewer than twelve Branches of the Artery with his Needle, though the Leg was taken off above the Knee, and the Swelling (in which the Veſſels were much more diſtended) extended no higher than the Patella, ſo that the Veſſels were diſtended even in the Thigh, where no Swelling appeared: The Femural Artery where it was amputated was very large, and the Poplitean Nerve was either naturally larger than uſual, or its Coats were rendered thicker by the Diſeaſe. The Muſcles and their Tendons were in their natural State, and the Bones, even thoſe of the Toes, in which there was an Ulcer, were all clean and ſound.

From whence it appears, that the morbid Matter of this Diſeaſe was ſolely depoſited in the Cellulæ of the Membrana Adipoſa, and

was not extended or carried into the Cellulæ of that Membrane which are expanded between the Muſcles and their conſtituent Fibres, but was depoſited in the external Cellulæ of that Membrane which contain the Fat, after each Paroxiſm of this peculiar Fever; and that the Cauſe of this monſtrous Leg, which gives the Name to this Diſeaſe, is the morbid Matter of a Fever which is gradually depoſited on the Leg by an imperfect Criſis of each Paroxiſm of this peculiar Fever, and is truly the Effect of that Diſeaſe; and may moſt properly be called a Chronical Diſeaſe, which ariſes from an acute one.

I think none of the *Greek Phyſicians* have given us any Deſcription of this Diſeaſe; neither have any of the *Arabians*, except *Mahomed Ebn Zacharia Rhazis* *, who has deſcribed its laſt or full grown State very well, but not the preceding Fever which produces it: He ſays, it may be cured in the Beginning of the Diſeaſe, but when it is grown inveterate, it is incurable; and the Reaſon of this, will appear more fully hereafter.

As this Diſeaſe is ſolely produced by the Fever above deſcribed, taking that Fever off, muſt conſequently prevent the Production of it, if it be taken before the Humours are fixed in the Leg.

An Enquiry into the Nature and Symptoms of this preceding Fever, though it is very

* Rhazis ad Monſor. Diviſion. p. 418.

very uncertain in its Intermiſſions, and irregular in its Periods, yet it plainly appears to be ſomething of the intermitting Kind; but one which has not been deſcribed before by any Author that I could find. It is well known that *Hippocrates* mentions a *Febris Septimana*, as an intermitting Fever whoſe periodical Returns are regular, but none of any longer Intermiſſion; beſides this, the Manner of this Fever's going off, by an imperfect Criſis, as above, is ſingular and peculiar to itſelf. Theſe Conſiderations firſt induced me to try the following Method of Cure, as all the other Methods uſed in theſe Parts were generally found to be unſucceſsful; and I found it to anſwer my Expectations, if the Diſeaſe was taken in proper time, before the Leg was much enlarged, and the Humours fixed there.

When the Rigor and Fever has ſeized the Patient, if I find one of the inguinal Glands inflamed, tumefied, hard, and painful, and the red Stroke from it down the Thigh to the Leg, which are the pathognomic Symptoms of this Diſeaſe, and certainly diſtinguiſh it from all other Fevers; though we find the Patient very hot, and the Fever pretty high, his Pulſe quick, *full, and ſoft*, though a little delirious: Bleeding ought not to be adviſed, though I have ſeen it too often too haſtily practiſed in this Caſe; as it hinders Nature from critically diſcharging the morbid Humour upon the Leg, and ſometimes turns it

upon the vital Parts, and proves fatal, as I have more than once ſeen it: But in ſome particular plethoric Conſtitutions, where the Fever is very high, the Pulſe rapid, ſtrong, *full, and hard*, and the Patient much delirious, ten or twelve Ounces of Blood may be taken away, but not without Caution and Judgment.

But whether you bleed or not, if the Patient has great Sickneſs at his Stomach, with Vomiting, or much Reaching to vomit, it is neceſſary to encourage the Vomiting, by drinking Green-tea, Camomile-flower-tea, or warm Water; and ſometimes to aſſiſt it by giving *Vini Ipocacuanh.* ʒi. *vel* ʒij. in them, to aſſiſt Nature in her Endeavours; and it is probable that ſome of the morbid Matter may be diſcharged that way; however the Action of Vomiting will aſſiſt her to caſt it off upon the Leg more effectually and ſooner; after which an anodyne diaphoretic Bolus may be given with a little Rhubarb, which will give a Motion or two after the two firſt have had their Effect, and may aſſiſt to carry a little more of the Humours off; as, ℞ *Rad. Rhei Pulv.* ϑi. *Pil. Saponac. gr.* vij. *Camphorii gr.* v. *Sal. Dieuretic.* ϑi. *Syr. e Mecon. q. ſ. Miſce. fi. Bolus ut ſupra ſumendus, ſuperbib. Seri Lactis vinoſ. tepidè copioſe, et Sudor. expectat.*

For it is neceſſary to encourage a free Diaphoreſis, and to continue it, by giving ſome *ſaline Draughts* after, and diluting plentifully with

with ſmall Wine-whey, Viburnium-tea, or Sage-tea; both as they abate the Violence of the Fever by Cooling and Sweating, and aſſiſt Nature to caſt off the morbid Matter both that way, and in her natural way upon the Leg. But if the Patient either from too great natural Weakneſs, or by too free Bleeding before we are called in, is too much ſunk, and the Pulſe be too weak and low, though very quick, we muſt endeavour to aſſiſt Nature to caſt off the morbid Matter, not only by the above-mentioned Methods, but more warming, cardiac, and volatile Medicines muſt be added; and if the Humours are carried to and affect the Head, bathing their Feet in a warm Decoction of Viburnium (called black Sage here) and Veſicatories muſt be applied to the Leg into which it uſed to fall, alſo, in order to derive the Humour down thither, if poſſible, or it will prove fatal.

Tho' the morbid Matter does moſt commonly fall upon the inguinal Glands, and ſo into the one Leg or the other; I have ſometimes known it fall upon the Arm, each time it came, and in more than one Patient; and I once ſaw a Patient where this morbid Matter was caſt upon the Scalp, the Ears, and the back Part of the Neck; and another wherein the Matter was caſt upon the lower Part of the Spina Dorſi, the Os Coxigis, and the lower Part of the Loins, at each time of the Return of the Fever, which was attended with all the

ſame Symptoms, as when it falls upon the Leg; and on what Part ſoever it falls the firſt time, the morbid Matter is generally caſt upon the ſame Part, in every Return of the Fever afterwards: But theſe two were very rare, and very uncommon Caſes.

As the Leg (or other Part on which the morbid Matter falls) is generally much inflamed and ſwelled, I uſually order it to be fomented with a Fotus of the following kind two or three times a Day, and to cover the Part with warm Flannel after, and keep it ſweating, in order to diſcharge and carry off as much of the morbid Matter as we can. ℞ *Fol. Alceæ, Viburnii, ana* Miij. *Fol. Salvæ, Flor. Sambuci, ana* Mi. *Sapon. Venet.* ℥ſs. *Sal. Ammoniac. Crud.* ℥i. *Miſce, coq. in Aq. pur.* ℔v. *deinde adde Spir. Sacchari, Aceti Com. ana* ℔ſs. *Miſce.*

And after the Fever-fit is entirely gone off, if the Patient's Stomach has not been ſufficiently cleanſed by the Vomiting, as above, I uſually give an Emetic; and as there is a ſufficient time before the Return of another Fit, and the following Alteratives alſo, before I give the Bark; with Variations *pro re nata.*

℞ *Sulphur. Antimon. præcipit.* ℈ijſs. *Mercur. calcinat. levigat.* ℈ſs. *Gum. Guajac. pulv.* ℈j. *Balſ. Peruv. q. ſ. Miſce, fi. Pil.* xl. *de quibus capiat Æger quatuor omni nocte hora decubit. inſuper bib. Decoct. ſequent.* ℥iij. ℞ *Rad. Sarſaparil.* ℥ij. *Saſſafr.* ℥j. *Serpent. Virg.* ℥ſs.

Sal.

Sal. Dieuretic. ʒſs. *m. coq. in Aq. Pur.* ℔ij *ad* ℔ij. *et cola, Colaturæ adde Sp. Nitri Dul.* ʒj. *Aq. Juniperi Com.* ʒij. *Miſce, Sumat ut ſupra, capiat etiam* ʒiij. *omni Mane.*

Theſe Medicines being taken, and the Inflammation and Swelling in the Leg (or other Part) gone off, I uſually give the *Cortex Peruv.* every three Hours, till the Patient has taken an Ounce and half, or two Ounces, with *Elix. Vitrioli acid. gut.* xl *vel* l. in Camomile-flower-tea, after each Doſe; and ten Days after taking the laſt Doſe, I give another Ounce of the Bark in the ſame Manner: And as this Diſeaſe is very ſubject to return, I uſually order another Ounce of the Bark to be taken in the ſame manner, a Month after that, and the Patient to go into the cold Bath, or the Sea, two or three times a Week for ſeveral Weeks after that again; and this Method, if ſtrictly followed, ſeldom fails to take the Fever entirely off, and prevent its returning, and conſequently the Elephantiaſis alſo.

But as the great Heat of this Climate greatly relaxes the animal Solids, and the People here cannot be prevailed upon to uſe cold Bathing, as they do in the Eaſtern hot Countries, and more frequently not to take their Medicines regularly, this Diſeaſe is very ſubject to return, eſpecially when they have ſuffered it to continue for a conſiderable long time, before they entered upon this Method of Cure; and then it is uſually more difficult

cult to be effectually cured, than it was at the firſt, before ſuch Return: In this Caſe, or where the Patient is of a weak, lax, Habit of Body, I always adviſe them to repeat the Alteratives once, and the Bark, &c. alſo, after it, in the Spring and Autumn following, viz. in the Months of April and November, and the cold Bathing after them, as before; which generally anſwers the deſired Effect: But if they neglect this Repetition, the Diſeaſe too often returns.

This Method generally ſucceeds when taken in time, before the Leg be grown too large, and the Diſeaſe is ſtrongly fixed there, and has been ſo a conſiderable long time: But when this Method has been neglected, or was not known, and the Diſeaſe has continued for ſeveral years, ſo that the Leg is grown very large, and its Membrana Adipoſa is become very hard and callous, or almoſt ſemicartilaginous, it cannot be removed, and we can only ſay with *Rhazis*, that it is incurable; and nothing but Amputation can relieve them from ſuch a Load of Leg: But alas! this does not relieve the unhappy Patient from the Diſeaſe, unleſs the Fever be taken off alſo, as above; for this Operation has been often performed, but always without removing the Diſeaſe, for the Fever has certainly returned, and the morbid Matter has as conſtantly fallen upon the other Leg, and produced the ſame Effects. And whether the above-mentioned

Method

Method and Medicines, will ſo effectually ſucceed after ſuch a long Continuation of the Diſeaſe, and the Amputation of the Leg, by eradicating its Cauſe, and ſo prevent its coming on the other Leg, or on ſome other Part of the Body, is what I have not had an Opportunity of experiencing, ſo as to ſay it will: But as it is both very reaſonable and highly probable that it may, I therefore recommend it to others, that they may try it, and I wiſh it may ſucceed.

Some have propoſed keeping the End of the Stump, after Amputation, open, in order to diſcharge the Humours that way, as by an Iſſue, and thereby prevent their falling upon the other Leg, &c. It may be tried, but I fear it will not ſucceed; becauſe ſo long as the Fever returns, the Humours will be renewed, and muſt fall ſomewhere, and the End of the Stump will not be ſufficient to receive and diſcharge them; wherefore the Method above of taking off the Fever, is much more likely to be ſucceſsful.

Others have tried Fomentations, Frictions, mercurial Unctions, and Bandages, in order to reduce thoſe monſtrous ſwelled Legs, but without Succeſs; for when it is become ſo large, and the Membranes ſo hard, callous, and ſemicartilaginous, it cannot be reduced nor cured by Art; *quia, extra Artis Limites eſt.*

Of

Of the VENA MEDINENSIS, DRACUNCULUS, *or* GUINEA-WORM.

THE *Vena Medinenſis*, or more properly *Nervus Medinenſis*, is another Diſeaſe, which is peculiar to ſome hot Countries, and has been well known for many Ages in *Arabia*, *Perſia*, and moſt probably in *Guinea*, and the ſouthern Parts of *Africa*. *Galen* is the firſt that mentions it, and calls it *Dracunculus**, but ſays that he never ſaw it. But all the *Arabian Phyſicians* whoſe Works are come to our Hands, deſcribe it clearly, and their Method of curing it: *Alſaharavius*†, or rather his Tranſlator, calls it *Vena Exiens*: *Meſuæ*, or his Tranſlator, calls it *Vena Egrediens*‡; and *Abulcaſim or Albucaſus*, *Vena Cruris*‖; *Haly Abbas*, *Vena Sanioſa*§; *Rhazis*, calls it *Vena Civilis*, and *Vena Medineſis***; and *Avicena* alſo, or his Tranſlator, calls it *Vena Medinenſis*‖‖; but all the *Arabian Authors* call it in their Language *Irk Medini*, i. e. *Nervus Medinenſis*, and not *Vena Medinenſis*, this being a Miſtake in their Tranſlators: The firſt from its Similitude to a *Nerve*, and *Medini*, of *Medina*,

* Galen. de locis Affect. 6. 3.
† Alſaharav. Oper. Tract. 28. C. 12. p. 118.
‡ Meſuæ Oper. Part. 2. S. 2. Cap. 7.
‖ Albucaſ. Lib. 2. Cap. 93.
§ Haly Abbas Theor. Practic. Tr. 26. T. 2. Cap. 1. p. 298.
** Rhazis Cont. Med.
‖‖ Avicen. Canon.

Medina, a City in *Arabia*, where it probably was firſt found, or taken notice of; though it is now no leſs frequent in ſome Parts of *Perſia*, as Dr. *Kempfer* obſerves, and after *Galen* calls it *Dracunculus**, but in ſeveral Parts of *Africa*, and the *Weſt-Indies*, it is commonly called the *Guinea-Worm*, becauſe the Negroes who come from thence, are ſubject to it, and frequently bring it in their Legs to the Weſt-India Iſlands.

Though this is called a *Nerve* or *Vein*, becauſe it reſembles the firſt, nevertheleſs it is a real *Worm*, of a white Colour except its Head, which is blackiſh; its Shape is round, long, ſmall, and uniform like a Nerve, or a Piece of white round Tape or Bobbin, and not broad and flat as ſome Authors ſay. It is found moſt commonly lodged in the Legs or Thighs, and ſometimes in ſome other Parts of the Body, in, or immediately under the Membrana Celluloſa, or in the Expanſions of that Membrane between the Muſcles, where it inſinuates itſelf, and is extended to a great Length; and is commonly from one to two Feet and a half long. It does not cauſe much Pain, till near the Time that it is ready to come out, when the Part where the Head of the Worm, which is always the firſt protruded, begins to ſwell, throb, and be inflamed and painful, like a ſmall Boil, generally in ſome Part of the Leg or Thigh, and

* Kempfer. Amenitat. Exotic.

and ſometimes, though very ſeldom, higher up on the Body. When this Boil breaks, the Head of the Worm, which is of a blackiſh Colour, is thruſt out firſt, and ſoon after more of it comes out and hangs down the Leg, till it is extracted in the manner hereafter deſcribed.

This Diſeaſe proceeds from drinking the Water of ſtagnating Ponds, in hot Countries, after Droughts and ſultry hot Seaſons, wherein the *Ova* or *Animalcula* of this Worm are contained, as in *Arabia*, *Perſia*, the *Eaſt* and *Weſt-Indies*; and I am informed that there are ſome ſtagnating Ponds in this Iſland, the waſhing in or drinking the Waters of which is ſubject to generate this Worm.

In the Cure of this Diſeaſe, both *Rhazis* and *Avicenna* adviſe giving Aloetics to haſten the Protruſion and Excluſion of the Worms: when the little Tumors, where the Head of the Worms begin to appear and ſwell, they haſten their Suppuration with Cataplaſms, or other Applications; and when theſe Tumors break, the End of the Worm being thruſt out, they adviſe it to be tied to a Piece of Lead made in a long Form, and about half a Drachm Weight, that the Worm may not contract and draw itſelf in again; and roll it round that Piece of Lead a little every Day, till it is all entirely extracted. The Surgeons here uſe the ſame Method, only they uſe a little Piece of Silk, Cotton,

or

or Lint inſtead of the Lead, about which they roll it daily an Inch or more at a time, till it is all extracted, taking great care not to break the Worm, (which Caution the *Arabians* alſo give) for if they break it, it is exceeding difficult, and ſometimes impoſſible to recover the End again; in which Caſe an Abſceſs, or rather many Abſceſſes, will be formed, not only at the Place of the Exit of the Worm, but all along the whole winding Meatuſes where the dead putrefied Worm remains, which ſometimes degenerate into bad Ulcers, and give the Surgeon much Trouble, and the Patient a great deal of Pain.

Giving Aloetics, or other antihelmitic Medicines, as the *Arabians* adviſe, to diſlodge and haſten the Extraction of the Worms, is a judicious Practice; but as theſe act more immediately on the Primæ Viæ, than the fleſhy Parts and Surface of the Body, the following coarſe Compoſition has been found to be much more efficacious:

℞ *Sulphur. Viv. Rad. Alii ana* ʒj. *Piper. Nigr.* ʒſs. *Camphor.* ʒij. *Spir. vinoſ. tenuis* ℔ij. *Miſce, et digere ſ. a. et cola, Colaturæ capiat Æger Cochl. duo bis vel ter de die.*

The ſubtile volatile pungent Parts of this inelegant Compoſition ſo ſtimulates and affects theſe Worms, that they generally endeavour to make their Exit, and draw themſelves towards the Surface of the Body, where a ſmall Tumour forms under the Skin, in

which they collect and coil themſelves up, and die; and the Tumour being opened, they are eaſily taken out whole; and not only the Worm which firſt appeared, but all the other Worms of the ſame ſort which are in the Body, do the ſame; and are thus taken out in the ſame manner, where they appear. And when the Worms are thus taken out, the Places from whence they were taken, being not much more than Skin deep, ſoon heal up with any common Digeſtive, and no further Uneaſineſs remains in the Parts from whence the Worms were taken, and the Patient enjoys as good a State of Health, as ever he did before.

Of the LEPROSY *of the* ARABIANS.

THE Lepra Arabum is indiſputably a Diſeaſe which is peculiar to ſuch Countries as are ſituated within the Torrid Zone; and was known many Ages ſince in *Arabia*, *Perſia*, and in *various Parts of Africa*; in which Countries it ſeems to have been indigenous. Different Names have been given to this Diſeaſe by different Authors, which has cauſed ſome Miſtakes and Confuſion among more modern Authors, who probably had never ſeen it. Moſt if not all the Greek-Phyſicians, who lived after *Galen*, have mentioned it; as *Aretæus* of *Cappadox*, *Paulus* of *Ægina*, and *Ætius* of *Amida*, and either call it

it ἔλεφας, *Elephantia*, or ἐλεφαντίασις, *Elephantiasis*, though it is a very different Distemper from what *Rhazis*, and what we now call an *Elephantiasis*. *Ætius*, * who lived in *Mesopotamia*, most probably had frequently seen it, and describes it and its Symptoms very well; but it is probable that the other Greek Writers had very seldom or never seen it, as they describe it less accurately than they generally have done other Diseases, with which they were more frequently conversant. *Ebn Zacariah Rhazis* the oldest of the Arabian Physicians, except *Serapion*, calls it *Lepra* †, the *Leprosy*, though *Haly Abbas*, or his Translator, calls it *Elephantia* ‡; *Avicenna* § gives it both these Names; and the learned Dr. *Lommius* ‖, has given us an elegant and concise Description of this Disease, and calls it *Elephantia*; yet several other modern Authors have confounded the Symptoms of this Disease, with those of the *Lepra Grecorum*, though they are quite different Diseases.

All the above-mentioned Authors, and several others, unanimously agree that this *Leprosy* is a contagious Disease, and that it not only descends from Parents to their Children,

* Ætius Tetera Biblos, Lib. 13. † Rhazis Division. L. 1. Cap. 120. p. 422. ‡ Haly Abbas Theor. L. 8. p. 97. Practic. L. 4. p. 197. § Avicen. Can. V. 2. L. 4. p. 133. &c. ‖ Lommii Observat. Med. pag. 53.

but that it is communicated from one leprous Perſon to others with whom he cohabits: and ſeveral of theſe Authors adviſe, that all leprous Perſons be ſeparated from the Commerce and Converſe of the Sound, as in the Plague, and to have ſuitable Places allotted to them to live in, either in an Iſland, or ſomewhere near to the Sea-ſhore, where all Communication with thoſe who are ſound, may be entirely cut off. This Dreadful Diſeaſe, was firſt brought to this and the other Sugar Iſlands by the Negroes from Africa, and is undoubtedly a Native of that Quarter of the World and Arabia, and is not originally of this weſtern Part of it; neither was it ever known here, before it was brought hither by the Negroes, among whom it is now too frequent here, and has made its way into ſeveral Families of the white People alſo; and it is much to be feared, that it will ſpread further in this warm Climate, into many more both white and black Families, if the legiſlative Power do not interpoſe, and endeavour to prevent its ſpreading, by ſome ſuitable, wiſe, and effectual laws, as we ſee the French and Spaniards have done.

This terrible Diſeaſe generally ſeizes the Patient inſenſibly, gradually, and ſlowly, when he ſeems to be in perfect Health, without Sickneſs, Pain, or any Uneaſineſs, nay, often without the Patient's knowing that he ails any thing, till ſome other Perſon obſerves,

that

that numerous Spots begin to appear in various Parts of his Body; firſt of a yellowiſh browniſh Colour, and ſoon after begin to turn to a browniſh purpliſh Colour in white People, and to a copper Colour in the Negroes: theſe Spots uſually firſt appear on the Forehead and Chin, and continue gradually to increaſe, both in Number and Magnitude, for many Weeks or Months, without the Patient's knowing that he has the Diſeaſe. And as theſe Spots increaſe, the Skin on and near thoſe Places begins to grow unequally thicker, then hard and rough, with hard Scales, eſpecially on the Face, Arms, and Legs, with a Numbneſs and Difficulty of moving the Fingers and Toes; theſe Scales are not like thoſe of the Lepra Grecorum, nor fall off as thoſe do. The Hairs on all the Parts of the Body gradually fall off; and become thinner. The Reſpiration gradually grows difficult, and the Voice obſcure and a little hoarſe, the Breath fœtid and offenſive, the Lobes of the Ears become thick and knotty, the Cheeks large and ſometimes tuberous, as alſo the Forehead and Eyebrows; the Chin is dilated, and all theſe are of a livid reddiſh Colour: Their Urine is thick and turbid, like to that of Cattle; their Diſpoſitions of Mind, Sleep, and Dreams, are diſturbed, like thoſe who are melancholy, and ſome are ſuddenly awaked out of their Sleeps as if they were ſuffocated, which cauſes them to jump up. All who labour under this Diſeaſe have frequent and

ſtrong Diſpoſitions to Venery. Varicoſe Veins of a blackiſh Colour, Warts or knotty Puſtules, are obſerved to riſe about the Root of the Tongue, under the Eye-lids, and behind the Ears. All theſe Symptoms gradually and ſlowly increaſe, and grow worſe as the Diſeaſe advances; and the Body becomes lean and deformed, while the Face, Calves of the Legs, and the Feet grow tumid, and the laſt moſt commonly cold and torpid. Thus the Diſeaſe continues to increaſe and grow worſe for many Years; when the Pinnæ of the Noſe being thick and tuberous, and its Cartilage or Septum is corroded and waſted away, or falls down, and the Noſe becomes thick and flat, ſo that the Noſtrils are in a great meaſure obſtructed, and the Patient's Voice ſeems hollow like a *Ventriloqui*. His Lips grow thick and are reverted; his Eyes are preternaturally round at their internal Angles, their Whites become yellowiſh, thick and hard, almoſt like the Nails of one's Fingers, by the Continuance of the Diſeaſe. The Hairs fall off from the Eye-brows and Eye-lids, which are grown thick, hard and callous, as alſo from the Chin, and others come up in their Place, but much fewer and ſmaller; the Ears at laſt become acute, and are extenuated and eaten away: the Fingers and Toes are greatly ſwelled, and crack with dry Fiſſures, and are ſometimes ſo puffed up, that they are, as it were, buried under the

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Tumour of themſelves and of the Feet. The Muſcles are waſted all over the Body; and the Face and Countenance ſo disfigured with tuberous Knots, as before-mentioned, that it appears deformed and horrid, ſuch as that of a Satyr is imagined to be, or like to that of a Lion; hence the Greeks gave this Diſeaſe both the Names of *Satyriaſim*, and *Leontiaſim*. And now when the Diſeaſe is arrived at its laſt Stage, the Voice is exceeding hollow, and virulent Ulcers affect the Hands and Feet, and ſometimes ſome other Parts of the Body; and the Skin, and Part of the Fleſh on the Feet, is entirely deprived of all Senſation, ſo that if you pierce them with a Needle, or ſcald them with boiling Water, or even apply a red-hot Iron to them, they are not ſenſible of any Pain. And at laſt the Humours are all become ſo very acrid, that a ſmall Fever ariſes, which ſoon carries off the miſerable Patient.

I have here deſcribed all the Symptoms which attend this loathſome Diſeaſe; not that every Patient who labours under it has every Symptom here deſcribed, but ſome have more, and others have fewer of them; though, in general, they have much the greateſt Part of them ſooner or later; and in this miſerable Condition, often drag on Life for many Years before they die. O the happy Climate of England, which is totally a Stranger to this, and ſome other miſerable Diſeaſes!

From the ſtricteſt Enquiry, and moſt accurate Examination of the Symptoms and Nature of this Diſeaſe, as alſo from anatomical Diſſections, it appears that the *Membrana Celluloſa* is the Seat of this Diſeaſe, which Membrane it follows almoſt into every Part of the Body, even into the very Bones, ſome Parts of which it tumefies and indurates, and renders uſeleſs, whilſt it corrodes, conſumes, and eats away other Parts, eſpecially the Cartilages, and ſometimes the very Bones, when it becomes inveterate.

Hence it appears, that when the Diſeaſe has continued a long time, and ſome Parts are eaten away, and others become uſeleſs, and the Humours are become ſo acrid as to corrode the Bones, and almoſt deſtroy the human Frame, no Remedies whatever can poſſibly cure it, as *Haly Abbas* *, and the learned Dr. *Lommius* ſay †; *Inveteraſcentem morbum hunc depelli remediis non poſſe.*

Yet ſeveral ignorant and illiterate Quacks, here, have promiſed a certain Cure, even at any time of the Diſeaſe, but have as conſtantly failed of Succeſs; for thoſe very Pretenſions and Promiſes, which ſuch Men uſually make, are ſufficient Proofs that they are both ignorant of the Nature of the Diſeaſe, and the Power of their Medicines. I grant that the leaſt Hopes of being delivered from

* Haly Abbas in loco citat. † Lommii Obſ. Med. Lib. 1. p. 55.

from ſo deplorable a Diſtemper, is ſome Excuſe for the Credulity of the People, and their ſuffering themſelves to be impoſed on by ſuch vain, ignorant Boaſters. And I mention this, to prevent ſuch Impoſitions for the future.

But if the Diſeaſe be taken in time, viz. at the Beginning, and firſt Appearance of its Symptoms, the Spots above-mentioned, &c. we have ſufficient Reaſons to believe it may be cured; and I have ſeen ſome Inſtances of its being cured.

Notwithſtanding that the Seat of the venereal Diſeaſe is allowed to be chiefly in the Expanſions of the *Membrana Adipoſa vel Celluloſa*, as well as is this Diſeaſe; and is principally cured by the Uſe of *Mercury*, or the different Preparations of it; yet it is very remarkable that this Diſeaſe is ſo far from being either cured, or relieved by it, that on the contrary, it is greatly increaſed, and all its Symptoms much aggravated by the Uſe of *Mercurials*. I grant that it ſeems to abate the Diſtemper for a little time, but it ſoon returns with almoſt double Force and Violence after it: And *Antimony*, or the beſt Preparations of it, which are of little Service in the former, are found to be the moſt efficatious Medicines in the Cure of this Diſeaſe, if properly given, and the Diſeaſe be taken in time.

When the above-mentioned Spots firſt appear, either of a yellowiſh, or browniſh purple Colour,

Colour, in order to diſtinguiſh and be certain whether they are the true Spots of this Leproſy, or they are Spots of another kind, which are not uncommon in this Climate, and look like them, but proceed from another Cauſe, and are of no bad Conſequence; anoint the Spots gently with a little *Ol. Tartari per deliquium*, and a little after rub it well off, and if the Spots diſappear, and return not again, they are not leprous Spots; but if they remain, or ſoon return again after being thus anointed and rubbed, they are the true Leprous Spots, though the Patient finds himſelf perfectly well in all other Reſpects, and may continue ſo for many Months. Wherefore it is neceſſary to attempt the Cure before the Diſeaſe gains further Ground, and becomes inveterate.

To which Purpoſe, if the Patient be of a ſanguine plethoric Conſtitution, it is adviſeable to bleed, to ten, twelve, or fourteen Ounces; after which an antimonial Vomit ſhould be given; and then let them enter on the following Courſe of Medicines, and continue it for two or three Months.

℞ *Sulph. Antimonii præcipit.* ʒiij. *Mercurii calcinat. levigat. gr.* xxx. *Gum. Guajac. pulv.* ʒiii. *Balſ. Guajacim. q. ſ. Ol. Saſſafræ gut.* xx. *Miſce, fi. Pil.* lxxxx. *de quibus capiat Æger tres omni nocte, hora decubitura, ſuperbib. gut.* L. *Tinct. ſequentis in* ʒiij. *Decoct. ſequentis.*

℞ *Vini Antimonial.* ℥ij. *Tinct. Aromatic.* ℥ſs. *Miſce, fi. Tinct. ut ſupra ſumenda.*

℞ *Rad. Sarſaparil.* ℥iij. *Cort. Saſſafr.* ℥j. *Sal. Diuretic.* ℥ſs. *Miſce, coq. vaſe clauſo in Aq. Pur.* ℔iijſs. *ad* ℔ijſs. *et cola; Colaturæ adde Tinct. Antimonii* ℥j. *Aq. Juniperi C.* ℥jſs. *Sacchar. q. ſ. Miſce, fi. Decoct. ut ſupra ſumend. Bibat etiam hujus Decoct.* ℥iij. *omni Mane cum gut.* L. *Tinct. ſupra præſcript.*

This Method ſhould be continued two Months, or longer if the Spots do not entirely diſappear before that time, for it is neceſſary to continue them for ſome time after they are gone off. And the Spots ſhould be rubbed well once or twice a Day, with a warm dry Flannel-cloth, firſt holden a little over the Fumes of burning Sulphur mixed with a little Antimony, and daily continued as long as the Spots remain.

If the Diſeaſe does not abate, and the Spots, Torpor, and Numbneſs decreaſe, it is ſometimes neceſſary to repeat the antimonial Vomit two or three times during this Courſe, eſpecially when the Diſeaſe is hereditary, or proves very obſtinate: And in this Caſe it is neceſſary to repeat the whole Courſe over again two or three Months after, however in the next Spring or Autumn following, or both if the leaſt Symptoms then appear, as we know no Diſeaſe that is more obſtinate or more difficult to cure. And as the infectious Miaſmata of this Diſeaſe, eſpecially when it is

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hereditary, are ſubject to lay as it were quiet and ſtill, without giving the Patient any Uneaſineſs, or even without ſhewing any Symptoms or Remains of the Diſeaſe, for a Year, or ſometimes Years, and then break out and ſhew its Malignity with Force again; I think it is abſolutely neceſſary to repeat this Courſe of Medicines every Spring and Autumn, eſpecially when it is obſtinate, for two Years, and when it is hereditary, for more Years; for too much Caution cannot be taken againſt ſo dreadful and loathſome a Diſeaſe. Wherefore I ſometimes give ſomething of the following Nature Spring and Autumn after all.

℞ *Antimonii crud. ſubtiliſ. levig.* ℥jſs. *Tartar. ſolubil. Sal. Diuretic. Milleped. præparat. pulv. ana* ℥ſs. *Zinziber. cond.* ℥ſs. *Syr. e Sulph. q. ſ. Miſce, fi. Elect. cujus capiat Æger q. Nuc. Moſc. major mane et hora decubit. inſuper bibend. Tinct. ſupra præſcript. gut.* L. *in hauſtu Decoct. ante præſcript.*

As to the dietetic Part of the Cure, it is not only neceſſary that the Patients live temperately, but there are ſeveral things which muſt be placed among the *Ledentia* in this Diſeaſe, from which the Patient muſt abſtain. They muſt religiouſly abſtain from all Swines Fleſh, and all fat Meats, and every thing that is oily, fat, or greaſy, either in Sauces or other ways, and that not only during the Time they are under this Courſe of Medicines, but for many Years after. They may eat any ſort of Fleſh-

meats

meats at Noon, that are not too fat, too much ſalted, or too high ſeaſoned, with Roots, Greens, and plain Sauces; but the more plain, ſimple, and the lighter, and more eaſily digeſted they are, the better: They ſhould be alſo very temperate in the Uſe of Wine and all ſpirituous Liquors, and ſtrictly abſtain from all kinds of malt Liquors, for they are by no means a proper Drink in the hot Climates, as they are too viſcid and glutinous a Liquid, they require more Labour and Action, in order to digeſt and animalize them, than can be well uſed here; and as the Heat is great, and we perſpire much, and ſoon, they are carried into the Blood too ſoon and too crude, before they are half digeſted and animalized, and often do much hurt, as I have often obſerved, and therefore mention it here. Small Punch moderately acid, is a much more proper Beverage for the hot Climates: Their Diet alſo Mornings and Nights ſhould be light and eaſily digeſted, and gently attenuating and diluting.

Theſe Rules may ſeem to be too rigid and ſevere to ſome, but they are abſolutely neceſſary, if the Patient is obliged to continue in a hot Climate, and yet deſires to recover his Health, and live free from this dreadful Diſeaſe. It is highly probable, that removing into a colder Climate, may conſiderably contribute to their Recovery, and re-eſtabliſhing

their

their Health, eſpecially as a hot Climate is the Parent and Producer of this Diſeaſe.

This Method has ſucceeded, when the Diſtemper has been taken in time, before it was too far advanced, and too deeply rooted in the Conſtitution, and the whole Maſs of the Fluids too much inquinated; I therefore communicate it to others, that they may either uſe it, or improve it if they can; and I wiſh them all Succeſs.

I have here given ſeveral *Formulæ* or *Preſcriptions*, which are only ſuited to ſome Conſtitutions and Caſes, and are only given as a general Plan; and am very ſenſible that it will be neceſſary to make ſome Alterations in them, as well in regard to the different Conſtitutions, as to the different Ages of the Patients: And ſo it is in all other Diſeaſes, wherein we muſt vary from any Rules which can be laid down; but the judicious Phyſician will from theſe readily know when, and how far, it is neceſſary to make ſuch Alterations.

But when this Diſeaſe is hereditary, and is arrived to its laſt Stage, ſo that the whole cellular Membrane is loaded with the morbid Matter, and the Bones corroded and eaten away, neither this Method, nor any other whatever yet known, can recover ſuch a Patient, nor poſſibly reſtore him to Health again; therefore we can only ſay with *Haly Abbas* and

and the learned and eloquent Dr. *Lommius*, " *Scire tamen licet, inveteraſcentem Morbem* " *hunc depelli remediis non poſſe. Nam extra* " *Artis limites eſt.*"

Of the LEPROSY *of the* JOINTS.

THERE is another Species of this Leproſy, which *Haly Abbas mentions*; he ſays, " *Sunt autem Elephantiæ ſpecies duæ.*" The firſt is that which is deſcribed before; " *Altera et ſecunda,———quam ex humore* " *nigro, quam ex colore generatur rubeæ aduſ-* " *tionem, in hac ſpecie membrorum eſt comeſtio* " *et caſus; et ab hac nulla ſanatur quovis* " *medela.*"

I cannot find that any of the Greek Phyſicians, nor yet any of the Arabians, except *Haly Abbas*, mention this kind of Leproſy, unleſs we ſuppoſe that they made no Diſtinction between this and the preceding Leproſy, and that they ſpeak of them as one Diſeaſe; and that they meant this ſort of Leproſy, where they mention the falling off of the Limbs, when they are treating on the *Elephantia* or other Leproſy. Dr. Town deſcribes this ſort of Leproſy, but with the Vulgar calls it the Joint Evil†, though it has not the leaſt Appearance or Nature of a Scrophula in it: But I am more ſurprized to find the ſame learned Gentleman call it a cutaneous

† Dr. Town on the Weſt India Diſeaſes.

neous Diſeaſe, when it eats the Fleſh even to the Bones, and corrodes them alſo, till the Fingers and Toes drop off Joint by Joint. He alſo ſays, that it is a Diſeaſe which has not been taken notice of by any Author; but if he had enquired further, he would have found that *Haly Abbas* the *Perſian Magus*, had deſcribed it almoſt 800 Years before him: However the Doctor has deſcribed it very well, and juſtly obſerves, that it was firſt brought hither by the Negroes from Guiney in Africa, where it now ſeizes many of the Negroes, both Natives and thoſe who are imported from Africa; and I may add ſeveral white People alſo, who are Natives; whatever it might do in his time, which is not much above twenty Years ſince, I cannot ſay.

This ſort of Leproſy, when it firſt appears, ſeizes the Patient in the ſame Manner, and with the ſame Symptoms, as the other kind of Leproſy before deſcribed; ſo that it is not poſſible to tell for a conſiderable time, whether of them it will prove to be: For when the Patient thinks himſelf perfectly well, ſeveral ſuperficial Spots of a yellowiſh, browniſh, Copper-colour, with a purpliſh Caſt in white People, and of a dark browniſh Copper-colour in the Blacks, firſt appear in ſeveral Parts of the Face, eſpecially about the Noſe, and ſoon after on ſeveral other Parts of the Body; at firſt without any Uneaſineſs or Roughneſs in the Skin, or any Senſe of Pain,

and

and often without the Perſon's knowing that they have either this, or any other Diſeaſe, till told of it by others who ſee them. Theſe Spots ſpread by ſlow Degrees, and increaſe both in Number and Magnitude, till they cover a conſiderable Part of the Body, and yet with very little Uneaſineſs or Pain; and thus they remain gradually and ſlowly to increaſe for ſeveral Months, and ſometimes Years, and then the Fingers and Toes begin to be numb, and gradually but ſlowly to ſwell, eſpecially at their Ends, and their Nails are curved inwards, which plainly ſhew it to be this kind of Leproſy: And thus they continue to grow ſlowly worſe and worſe, till their Fingers and Toes begin to ulcerate; the Ulcers are very ſmall, never digeſt, nor are much inflamed, but generally look dry, without much Foulneſs, Matter, or Fœtor, and, being almoſt inſenſible, without much Pain: Theſe gradually creep on from one Joint to another, and corrode the Ligaments, Tendons, Nerves, and all the Veſſels to the very Bones, but without much Pain, all the Parts being benumbed and almoſt deprived of all Senſation; and that Joint ſoon drops off eaſily, and the Ulcers creep on to the next Joints, which ſoon drop off in the ſame manner, and ſo creep on from Joint to Joint, till all the Fingers and Toes are corroded and quite dropt off: It then ſeizes the Joints of the Carpus and Metatarſus; but before it can erode all thoſe, it alſo ſeizes the

Trunk of the Body, and breaks out in little ſmall dry Ulcers, with dry Scabs in the Arms, Legs, and moſt Parts of the Body; and now the Diſtemper becomes infectious, if it was not ſo ſooner. Theſe ſmall Ulcers never penetrate deep into the muſcular Fleſh of the Body, but ſpread and extend themſelves on its Surface, in the *Membrana Adipoſa*, and diſcharge a little thin acrid Ichor, which dries up into ſcaly Scabs, and emaciates the Patient away, ſometimes in two or three Years time, and often is much longer before it puts an end to their miſerable Life; for there are ſome Inſtances of Patients who have dragged on a miſerable loathſome Life for ten or fifteen Years or more, before they died.

The Method of Cure in this, muſt be the ſame as in the other kind of Leproſy; for it is no leſs remarkable in this, than in the other, that all *Mercurials*, however prepared (except the *Mercurius calcinatus*, given in ſmall Doſes as an Alterative with Antimonials, as before;) do in this, as well as in the other kind of Leproſy, greatly aggravate all the Symptoms, and increaſe the Diſeaſe: But if it be taken in time, at the firſt Appearance and Beginning of the Diſeaſe, and treated with Antimonials, in the ſame manner as in the other Leproſy, we have great Reaſon to hope for Succeſs; though I have not had ſuch Opportunities of trying it in this, as I have had in the other. But when the Diſeaſe is hereditary from their Parents,

Parents, or has been neglected too long, till the Joints are begun to fall off, and all the Fluids ſo inquinated and infected, we can do no more than ſay with *Hali Abbas*, That no Remedies yet known, however powerful and efficacious, can prevail againſt, and cure this Diſeaſe.

Of the YAWS.

THAT Diſeaſe which the Negroes in Africa, and we in the Weſt Indies, from them, call the *Yaws*, is a Native of, and ſeems to be indigenous in Africa and Arabia; and was firſt brought from the former by the Negroes into America and its Iſlands.

This is a Diſtemper which has been well known for many Ages in Africa, and ſome of its neighbouring Countries which are ſituated within the Torrid Zone: But I do not find that any of the *Greek Phyſicians*, nor yet any of the *Arabians*, do mention it, except *Hali Abbas* the Perſian Magus, who I think has deſcribed it in his *Theoria*, cap. 16. lib. 8. and calls it the *Lepra:* He briefly deſcribes it thus; " *Lepra albedo eſt quæ in ex-*
" *terioribus fit Cutis: Et aliquando in quibuſ-*
" *dam ſine aliis eſt membris: Nonnunquam ve-*
" *rò in toto fit corpore interdum ut totius fit cor-*
" *poris color albus.——quæ in membro eſt, ſi*
" *ex mala fit frigida complexione, hæc ſunt*
" *Signa; quum membrum in quo eſt, album eſt*

" *colore, itidemque ejus pili; et ſi cutis phle-*
" *botomo vel certe acu pungitur, ſanguis ab*
" *eo non egreditur, ſed humiditas alba.*

From this ſhort Deſcription of the Diſeaſe, and from its being only in ſome Parts or Members of the Body, and ſometimes all over it, on the Skin, and its white Colour, and particularly the Hair's turning white, and upon opening the little Tumors, only a white Humour coming out; I think he meant this Diſeaſe which we now call the *Yaws*, an African Name, and not the *Lepra Arabum*, of which he treats in the preceding Chapter, and with the *Greek* and ſome of the *Arabian Phyſicians* calls that *Elephantia*, but he calls this *Lepra*; and whether this Diſeaſe is not the ſame with the Leproſy of the Jews, will admit of ſome Diſpute, though it is moſt probable that it is; but as the Deſcription which Moſes their Legiſlator has given us of their Leproſy *, is ſo very ſhort and undeſcriptive, it is difficult to determine; though it is more reaſonable to ſuppoſe that it was this Diſeaſe, than the *Lepra Arabum*, and if ſo, it is a Diſeaſe of great Antiquity: Neither can we collect any thing from Moſes's Method of curing it, that can be any way uſeful to us now in curing it; for if the leprous Perſon did receive any Benefit from the Method which Moſes preſcribes, and has left us, it muſt have ariſen from a miraculous or ſuper-

* Leviticus, chap. xiii.

ſupernatural Power, and not from his being ſprinkled with the Blood of a Sparrow, or any other Bird, nor from any thing elſe that the Prieſt did to the Leper; though he was ſure of being a conſiderable Gainer by the Cure.

We are credibly told, that the *Yaws* ſeldom fail to attack the Negroes in Africa, at one time or other in their Life-time, but moſt frequently the Children and young People; and that they very rarely or never have it a ſecond time, if they have been perfectly cured the firſt time, either in their own native Country by their Negro Doctors, or after they arrived here; for the Negroes have by long Obſervation and Experience, found out a Method of curing this Diſeaſe with the cauſtic Juices of certain eſcarotic Plants externally applied, and giving the Juice or Decoctions of others internally, which they keep as a Secret from the white People, but preſerve among themſelves by Tradition; with which they ſometimes perform notable Cures, both in this, and ſome other Diſeaſes.

This Diſeaſe generally makes its firſt Appearance without any previous Sickneſs or Pain, and when the Patient thinks himſelf perfectly well, in very ſmall Pimples no bigger than the Head of a ſmall Pin, and are ſmooth and level with the Skin; theſe daily increaſe and become protuberant Puſtules; ſoon after the Cuticle turns whitiſh, cracks, and rubs off, and a very ſmall Quantity of Serum or

clear Ichor exudes out and dries, and becomes white, but neither Pus nor any Quantity of Ichor is found in the Tumor, but a pretty thick, white Slough appears, and under that a red fungous Fleſh thruſts itſelf out of the Skin, which gradually increaſes to different Magnitudes, ſome not ſo large as the ſmalleſt Wood-ſtrawberry, ſome larger; others exceeding the Size of the largeſt Mulberry, which laſt they very much reſemble, being red, and compoſed of little round Knobs as they are: They appear indifferently on all the Parts of the Body, but moſt frequently, and generally are the largeſt, about the Groin, private Parts, Anus, under the Arms, and in the Face: And it is remarkable, that in general when the Yaws are very large, they are fewer in Number; and è contra, when they are more numerous, they are generally ſmaller in Size. And as the Yaws are thus increaſing and coming to their Height, the black Hairs which grow out of the Places where the Yaws are, gradually turn to be perfectly white, like the Hair of an old Man; and the Ichor which ouzes out of the Yaws, drying upon the Skin, makes it appear of a whitiſh Colour, and renders the Patient a diſagreeable loathſome Sight: And now the Diſeaſe is become very infectious to thoſe who handle or co-habit with them.

All this Time the Patient neither loſes his Appetite, Fleſh, nor Strength, and otherwiſe ſeems

ſeems to be in good Health; being free from any Pain, or any Uneaſineſs but what the diſagreeable Naſtineſs of the Sores, and a little Soreneſs occaſions, for they are not painful unleſs they are roughly touched and rubbed.

The time from their firſt Appearance in the before-mentioned ſmall Pimples, to their full Height or Growth, is very different in different Conſtitutions, as they are ſtronger or weaker, and according to the Negro's being well fed, or the contrary; for when the Negro is ſtrong, luſty, and of a plethoric Habit, and is well fed, the Yaws will often arrive at their full Growth, and be as large as a Mulberry in a Month's time from their firſt Appearance; but when the Negro is weak, low in Fleſh, and poorly fed, the Yaws will be ſmall, and often no larger than a Strawberry at the End of three Months.

This Diſeaſe is known to be infectious, but there is alſo a peculiar Aptitude in ſome Conſtitutions to receive it more readily, than in others, and probably in the ſame Perſon to receive the Infection more readily at one time, than at another time; as is alſo obſerved in the Small-pox.

This is a Deſcription of the true natural Appearance of the Diſeaſe, when it is left entirely to Nature, and is neither retarded nor haſtened by Medicines, nor altered by external Applications; and it will continue in this State a long time, without any material Alteration, if let alone; and what would be the Conſequence,

ſequence, if it was left to continue without any medical Applications, is uncertain, as I have never yet ſeen one ſo left without ſome Attempts to cure it; but it is moſt probable that the Fungus's in the Yaws, would in time become phagedenic Ulcers, which would corrode and eat away the Fleſh even to the Bones, and then produce Nodes, Exoſtoſes, and Caries in them, and at laſt totally conſume and deſtroy them alſo, as we ſee it does when the Diſeaſe is wrong treated, and the Cure attempted without Succeſs. For when this is the Caſe, and the Patient has taken a conſiderable Quantity of Mercury, or has been ſalivated, eſpecially if by Unction, too ſoon in the Diſeaſe, before the morbid Matter was ſufficiently caſt out to the Surface of the Body, or has been repelled into it by that or any other Means; tho' the Skin has been by ſuch Methods ſufficiently cleared; yet the Diſtemper not being thereby effectually eradicated and cured, it will return again, and then becomes exceeding difficult to cure; and if it has made ſeveral of thoſe Returns, and has been repelled, and has at laſt broke out in malignant Ulcers, and corroded the Bones, it is too often incurable. But if the Diſeaſe be judiciouſly treated at the firſt, it ſeldom or never proves dangerous, and very rarely difficult to cure.

There is another vile Cuſtom which I muſt take notice of, which the Surgeons of the Guinea Ships generally practiſe; that is, upon

on the firſt Appearance of the Yaws, during the Voyage from Guinea, they apply ſome ſtrong Repellents to them; ſuch as the Juice of roaſted Limes mixed with the Ruſt of Iron, and Sulphur or Gunpowder; by which they repel the morbid Matter into the Blood, where its Acrimony is increaſed, though they thereby render their Skins clean for a ſhort time, and then rub them with Palm-oil, which makes them ſoft and look well, when they are impoſed upon the Planters for ſound, healthful Negroes; but in a few Days or Weeks after they have purchaſed them, the Virulency of the morbid Matter being increaſed by the Retention, and the Heat of the Body, the Yaws break out again much worſe than ever, and are then very difficult to cure, or ſometimes incurable.

As this Diſeaſe proceeds from a peculiar kind of *infectious Miaſmata*, which is firſt generated in, and is indigenous to the hot Climate of *Africa*; which Nature, when ſhe acts in the moſt ſalutiferous manner, always caſts out on the Surface of the Body, when not hindered by injudicious or male Practice; it conſequently follows that the true Intentions of Cure, are, Firſt, *To aſſiſt Nature to expel all the morbid Matter to the Surface of the Body, that as much of it as poſſibly can, may be diſcharged that Way:* And, Secondly, *To correct the remaining Part, and deſtroy ſuch Part of it as is not diſcharged, but remains lodged*

lodged in thoſe Funguſes and Ulcers, together with them, by the Uſe of proper Eſcharotics.

Wherefore, as ſoon as the above-mentioned Pimples begin to appear, let the Negro be confined in a Houſe, or ſeparate Room from the reſt of the Negroes; or if you are not certain whether it be the *Yaws*, or a ſort of *Itch*, which the Negroes call in their Language *Crocrow*, as they much reſemble each other at their firſt Appearance, though they differ greatly ſoon after; ſhut the Negroe up in a Room ſeven Days, and look on him again as the Jews were commanded to do with their *Lepers*, *Levit.* Ch. xiii. in which time, one may moſt commonly be certain whether it be the Yaws, or not; and if it be, it will be neceſſary to give ſomething of the following Nature, in order to aſſiſt Nature to haſten the Expulſion of the morbid Matter, and bring the Yaws to their full Growth.

℞ *Æthiop. Mineral.* ʒjſs. *Antimon. Crud. pulv.* ʒj. *Theriac. Androm.* ʒj. *Camphorii pulv.* ʒj. *Syr. Zinziber. q. ſ. Miſce, fi. Elect. cujus capiat Æger q. N. Moſc. major. mane et hora decubitura, ſuperbibend. Vini Antimonial. gut.* xl. *in hauſtu ſeri lactis vel Theæ, et contin. donec Tumores* (the Yaws *dict.*) *ad Maturitat. perveniunt.*

It may be certainly known that the Yaws are come to their full Height, by their being at a ſtand, and neither increaſing in their Number nor Magnitude: And when you ſee that they are at a ſtand, it is a proper time

time to begin to give Mercurials to raiſe a Ptyaliſme; which is much better done by giving *Calomel* daily than by Unction, in this Diſeaſe, leſt the latter ſhould carry the morbid Matter from the Skin into the Maſs of the Blood again; neither is it prudent to apply any mercurial Unguents to the Yaws, for the ſame Reaſons: The beſt Method is to give *Calomel gr.* v. or vj. twice a Day till a moderate Salivation is raiſed, and the Patient ſpits a Pint and half every twenty-four Hours, and never raiſe it higher, for few Patients in this hot Climate, can bear a Ptyaſme to be raiſed ſo high without danger of ſinking under it, or bringing ſome other bad Symptoms on. By the time that the Salivation is raiſed to near a Pint and half, the Yaws are generally all covered over with dry ſcaly Scabs, which then begin to fall off daily in white Scales or Scabs, and uſually in ten or twelve Days time more leave the Skin, ſmooth, ſoft, and clean. And as ſoon as the Scabs are fallen off, and the Skin begins to be clean, ceaſe to give any more Mercury, and let the Salivation go off gradually of its own accord; or if it continues too long, give a Doſe of Rhubarb, or ſome other ſuitable gentle Cathartic.

It frequently happens that after the Yaws are in general gone off and healed, and the Skin is become ſoft and clean, that one, or more large Yaws ſtill remain riſing high, and are red, knotted, and moiſt, diſcharging

a little Ichor; this is uſually called the Maſter-yaw, from its being bigger than any of the reſt: Some have been ſo imprudent as to continue, or repeat the Salivation to carry it or them off, to the Prejudice of the Patient; when in reality nothing more is neceſſary, than totally to deſtroy that Yaw, or thoſe Yaws ſo remaining, and all their contained fungous Fleſh, with gentle Eſcharotics; and then to incarn and cicatrize the Place with any common Digeſtive and Deſiccative.

Some uſe the *Lapis Infernalis*, others a Solution of *Mercur. Sublimat. Corroſiv.* ʒj. *in Spir. Vini Rect.* ʒj. and gently touch the remaining Yaws with a Feather dipp'd in this, twice a Day, till they are all conſumed: Others uſe blue Vitriol, or a Mixture of *Mercur. Corroſiv. Rubr.* ʒj. *Alum. uſt. pulv.* ʒſs. *m.* This laſt is the gentleſt, and ſafeſt, and at the ſame time full as effectual, and therefore is much the beſt.

During the uſe of theſe Eſcharotics, it is neceſſary that the Patient take ſomething of the following Nature, in order to expel any remaining morbid Matter, as well as to prevent any of it being repelled into the Blood by thoſe topical Applications, as alſo to correct the Acrimony of the Humours, and ſweeten the Blood, and to reſtore the Patient's perfect Health.

℞ *Ethiop. Mineral.* ʒjſs. *Antimon. Crud. pulv.* ʒj. *Theriac. Androm.* ʒſs. *Gum. Guaiaci pulv.* ʒiij. *Syr. Commun. q. ſ. Miſce, fi. Electar.*

Capiat

Capiat Æger q. Nuc. Moſc. major. Mane Nocteq; inſuperbibend. Vini Antimonial. gut. xl. *vel.* l. *in hauſtu Decoct. Rad. Sarſaparil. et Lign. Saſſafræ.*

Theſe Methods generally ſucceed, even in the moſt numerous and worſt kind of Yaws, provided they have not been tampered with, and the morbid Matter frequently repelled, before, or other ways wrong treated. But if after giving the firſt Medicines, the Yaws are not numerous, nor of a bad kind, and by their coming to Maturity ſoon, it appears that the morbid Humours are effectually expelled; giving theſe following Medicines, and uſing the laſt eſcharotic Powder as above, moſt commonly effectually cures them without a Salivation.

℞ *Sulph. Antimon. præcipit.* ʒij. *Mercur. Calcinat. levig. gr.* xxiv. *Gum. Guaiac. pulv.* ʒij. *Camphor.* ʒſs. *Balſ. Guaiacin. q. ſ. Miſce, fi. Pil.* lxx. *de quibus capiat tres omni nocte hora decubit. ſuperbib. Vini Antimonial. gut.* xl. *in hauſtu Decoct. Rad. Sarſaparil. et Ligni Saſſafræ.*

It ſometimes happens, that after the Patient is cured as before, and all the Yaws are entirely gone; and the Skin in every Part of the Body, except the Soles of the Feet, is perfectly ſoft, ſmooth, and ſound, that Tumours or little hard Swellings will remain on them, which are painful, and ſo very ſore, that they can neither ſtand up nor walk, nor even bear them to be touched without great

great Pain. This proceeds from Yaws riſing on the Soles of their Feet, and the Skin there being very hard and thick, from their going Bare-foot, ſo that the Yaws cannot puſh thro' ſo thick a callous Skin. This is eaſily remedied by bathing their Feet in warm Water, and paring off the callous Skin, and the Yaws will appear, and puſh themſelves out, when they may be ſoon deſtroyed by the above eſcharotic Powder, and the Place cured as in the Maſter-yaw.

But the worſt Circumſtances, attending this Diſeaſe, proceed from a wrong Method of treating it; either by the Uſe of ſtrong repelling Applications, or by too haſtily giving Mercurials, and bringing on a Salivation, before Nature has ſufficiently expelled the morbid Matter to the Surface of the Body, as that is the ſalutiferous Way ſhe takes, and points out to us to follow, when ſhe is not hindered by wrong Methods and Medicines, which return the morbid Matter into the Blood again, when ſhe has caſt it out; when it falls upon ſome other excretory Paſſages, by which it never can be carried off, but is caſt upon various Parts of the Body, where it produces the moſt malignant kind of phagedenic Ulcers, which when they can be come at, are either exceeding difficult to cure, or are ſometimes incurable. Or if it falls upon the Bones, and brings on gnawing Pains in the Limbs, with violent nocturnal Pains, like thoſe which attend the venereal Diſeaſe, and

at

at laſt produces Nodes, Exoſtoſes, and Caries in the Bones, which in time eats them away, and the Patient after continuing a long time, ſometimes Years, in this miſerable Condition, at laſt dies torpid. This is a moſt deplorable Caſe! But if it be taken, when they have only the external Ulcers, and before the Pains in the Bones, with Nodes, Exoſtoſes, and Caries come on and ſeize them, it may ſometimes be cured by the following Method, which has ſometimes ſucceeded when a Salivation has failed. A Salivation may be tried in ſome Caſes; but if it does not bring the Ulcers to digeſt and heal, proceed no farther, but give the following:

℞ *Sulph. Antimon. præcipit.* ʒijſs. *Mercurii calcinat. levigat.* ʒſs. *Gum. Guaiac. Pulv.* ʒiij. *Balſ. Guaiacin. q. ſ. Camphorii Pulv.* ϑij. *Miſce, fi. Pil.* lxxx. *de quibus capiat Æger tres omni Nocte, hora decubitura, inſuperbibendo Decoctionis ſequentis* ʒv.

℞ *Rad. Sarſaparil.* ʒiij. *Cort. Saſſafræ* ʒj. *Sal. Nitri* ʒſs. *Miſce, coq. in Aq. Pur.* ℔iij. *ad* ℔ij. *et cola, Colaturæ adde Aq. Juniperi Comp.* ʒiſs. *Sacchar. Alb. q. ſ. Miſce, fi. Decoc. ut ſupra ſumenda.*

℞ *Vini Antimonial.* ʒj. *Tinct. Aromatic.* ʒij. *Miſce, Capiat gut.* L. *omni Mane, et hora quarta poſtmerid. in* ʒv. *Decoct. ſupra præſcript.*

And the Ulcers may be dreſſed with this:

℞ *Ung. Baſilic. flav.* ʒj. *Mercurii Corroſiv. Rub. levigat.* ʒi. *Alum. uſti pulv.* ʒſs. *Miſce, fi. Balſ. Digeſt.*

And

And when the Ulcers are clean, and begin to incarn, and tend to cicatrize, they may be dreſſed with this, till they are perfectly healed, and well.

℞ *Empl. Commun. cum Gum. e Minio una* ℥ſs. *Mercurii Corroſiv. Rubr.* ʒij. *Alum. uſt. Pulv.* ʒſs. *Miſce, fi. Empl.*

But when the Bones are affected with Nodes, and are become carious, and are in part eaten away; which moſt commonly happens to ſuch Bones as are of the moſt ſpungy Nature, as are thoſe of the Metacarpus and Fingers, and Metatarſus and the Toes, and the Spine, with the Epiphaſes of the other Bones, the Caſe is deplorable and incurable; nor will Amputation avail even when it is in the Hands, Feet, or in ſuch Parts where that Operation can be performed; becauſe the Humour will ſoon fall upon ſome other Parts, and produce the ſame Effects.

Of the IMPETIGO *or* RING-WORM.

THE Impetigo is a cutaneous Diſeaſe, which was well known to the ancient *Greek* and *Arabian Phyſicians*, and is more or leſs frequent ſtill in moſt other Nations; but it is uſually ſo mild and ſo eaſily cured in the colder northern Countries, that it may be thought unneceſſary to ſay any thing of it here:

But it is ſo frequent, and ſo much worſe, and ſo very troubleſome and diſagreeable as well

well as painful a Diſeaſe, in the Weſt-India Iſlands, and in that Part of the Continent of America, which is ſituated in, or near to the Torrid Zone, that it may not only be ſaid to be indigenous to them, but is often difficult to be cured.

We are told by ſome of the firſt Voyagers into this Part of the World, that the original Natives of theſe Iſlands were then and ſtill are ſo ſubject to a cutaneous Diſeaſe, which is either this, or one which very much reſembles it, which they call in their Language a *Cowrap*; that they have a Tradition among themſelves, that one of the ſeven firſt People that were created when the World was firſt made, (for ſo many they ſay were at firſt created) was a *Cowrap*.

From this Tradition we may however conclude that it is a Diſeaſe, at leaſt among them, almoſt as ancient as the Race of Mankind. Though we do not find that they had any of the before deſcribed Diſeaſes, which are indigenous to Africa, and have been imported with the African Negroes from thence, to theſe weſtern Parts of the World; though theſe Parts are as warm as Africa is.

This Diſeaſe firſt appears, without any previous Sickneſs or Pain in any Part of the Body, in ſome in one Part, in others in another Part, firſt in many ſmall Puſtulæ or Pimples, cluſtering together, moſt commonly in or near to a circular Form, the Bigneſs of a Sixpence or a Shilling, of a reddiſh Colour,

and contain a ſmall Quantity of clear, acrid, ſaline Lymph; but they ſoon ſpread, ſometimes to be as large as the Breadth of the Hand, or broader, and itch moſt intolerably, eſpecially upon the Perſons putting off his Cloaths at Night, often to ſuch a Degree that human Reſolution is not able to reſtrain their Hands from ſcratching; and that or rubbing them briſkly, breaks the ſmall Pimples, and the acrid Lymph ouzes out, and cauſes a Heat and Smarting, and then it dries upon the Skin, and forms whitiſh Scales or Scabs, which upon rubbing or ſcratching fall off again, and are daily renewed in the ſame manner, with the ſame Symptoms of itching, &c. Thus they increaſe and ſpread to various Parts of the Body; and ſometimes they will leave one Part of the Body and remove to another Part, without any Remedies being applied. And in this State the Diſeaſe will continue for many Years, and probably would remain during the Patient's Life, if not removed by proper Remedies.

This is truly a cutaneous Diſeaſe, and is thought by many to be contagious, and probably it may be ſo in its moſt virulent State; and whether it ariſes from ſmall Animalculæ, like or ſomewhat different from the Hand-worm, which is ſaid to cauſe the Itch, or it ariſes from the Heat of the Climate which ſo exalts and ſemivolatilizes the Salts and oily Particles of the animal Fluids, as to change them from their ſoft bland ſemiammoniacal State,

State, to a ſemivolatile, acrid Nature, which obſtruct the ſudorific Ducts and perſpiratory Pores of the Skin, where being retained, they are, by the Heat of the Body and the Climate, ſtill rendered more acrid and corroding, and ſo ſtimulate the obſtructed Ducts and Pores, as to produce thoſe ſmall Pimples and the almoſt intolerable Itching, and thoſe being broken and torn by ſcratching, the acrid Lymph ouzes out and forms the Scaly Scabs; and this being daily repeated, increaſes the Acrimony of the Humours, and the ſpreading of the Diſeaſe to other Parts of the Body. And when the Diſeaſe is ſuffered to continue a long time, as it is ſometimes for Years, the Lymph diſcharged becomes ſo very acrid that it corrodes the Parts affected deeper, and expands them larger, and at laſt degenerates ſometimes into a *Herpes exedens*. For this is only a more virulent and malignant Degree of the Impetigo.

This being ſufficient to produce this Diſeaſe, without ſuppoſing any Animalculæ, it is not neceſſary to multiply Cauſes, at leaſt till ſuch are diſcovered by microſcopical Obſervation; ſince Nature is obſerved not to multiply them where one is ſufficient, and the Remark made on the Acrimony of the Sweat, &c. before, is ſufficient to confirm this. Wherefore the Intentions of Cure are to attenuate, break, and diſſolve thoſe viſcid, ſaline, acrid Moleculæ which are detained in, and obſtruct thoſe ſudorific Ducts and per-

ſpiratory Pores, in the Parts affected, ſo that they and the obſtructed Fluids may be regularly exhaled and carried off.

Now it is well known, that of all the Medicines, whether vegetable, animal, or mineral Subſtances, that we are yet acquainted with, *Mercury* is a Body which is the moſt peculiarly adapted and fitted to anſwer theſe Intentions of Cure (whether the Diſeaſe proceeds from theſe Cauſes, or from the ſuppoſed Animalculæ) by its great Gravity and eaſy Diviſibility into the minuteſt ſpherical Particles; and long Experience has alſo confirmed this.

It may be thought by ſome Perſons, that ſome Evacuations, as Bleeding and Purging, may be neceſſary, before we either give Mercury internally, or uſe it externally; but unleſs a Plethora indicate them, they are neither of any Service in this, nor in ſome other cutaneous Diſeaſes; and Purging may divert the Mercurials from the Skin, where they are intended to act, towards the Inteſtines afterwards, and ſo do hurt.

If the Diſeaſe is recent, and has neither continued long, nor ſpread much, nor the Humours become very acrid, it is moſt commonly very eaſily cured, even with a little *Sulphur* either mixed with a little *Unguent. Simplex*, or with a little *Diapalma* made into a Plaſter and applied to the Part affected; or if that be waſhed with a Lotion made with *Rad. Hellebori Albi* and a little *Vitrioli Albi* in-

infuſed in Water, and a few Doſes of *Lactis Sulphuris* taken inwardly, at the time of uſing them. But if the Diſeaſe has been neglected, and has continued a long time, ſo that it is become inveterate, and the Lymph or Serum which it diſcharges is become very acrid and corroding, or where it is degenerated into a *Herpes exedens,* it is difficult to be cured; and applying any Unguents, Lotions, or any repelling Medicines topically, without giving proper internal Medicines at the ſame time, may be, nay, have been attended with bad Conſequences; for ſome who have injudiciouſly made uſe of ſuch repelling Applications, have turned that acrid Humour upon the Bowels, or the Lungs, or on the vital Parts, which have produced very bad Conſequences.

Wherefore, tho' the ſlight eaſy Things above-mentioned may cure it when it is moderate and recent, in ſome Conſtitutions; yet when it has continued a long time, and the Humour is become very acrid, and the Conſtitution bad, more powerful and active Remedies are required: And I have found ſomething of the following kind to be the moſt ſucceſsful.

℞ *Mercurii calcinat. ſubtiliſ. levigat.* ℈i. *Sulphur. Antimon. præcipitat.* ℈iv. *vel.* v. *Gum. Guaiac. pulv.* ʒj. *Balſ. Guaiacin. q. ſ. Miſce, fi. Pil.* xl. *de quibus capiat Æger duas omni nocte hora decubitura.*

℞

℞ *Vini Antimonial.* ℥i. *Tinct. Aromatic.* ℥ſs. *m. capiat gut.* lx. *omni mane in hauſtu Infuſionis Rad. Sarſaparillæ.*

Where the Conſtitution of the Patient is pretty ſtrong, and the Diſeaſe inveterate, he may take the ſame after the Pills at Night alſo; and after he has taken them ſeven or eight Days, he may begin to anoint the Parts affected with a little of the following every other Night, till he has uſed it four or five times, and continue the Uſe of the above Pills and Drops at the ſame time: And if any Appearance of the Spots remain, or return, may juſt touch them with a very little of the Ointment again, till they are perfectly well. And if theſe Pills and Drops move the Belly more than once or twice (at moſt) a Day, I uſually give *Extract. Thebaic.* gr. ſs. with each Doſe of the Pills, or ſo much as may be found neceſſary to ſtop the Purging; in order that they may be carried into the circulating Fluids, and have their proper Effect upon them, and correct and alter the acrid Humours.

It is well known that *Secrets* and *Noſtrums* have been greatly extolled and quacked upon the Publick, as infallible Remedies for this Diſeaſe; as the *Terra Macke-machee* among the Spaniards; an Infuſion of the *Radix Helleborі albi*, with a little *alkaline Salt* in Water, and a little Milk added to diſguiſe it, by the French; and ſeveral more have been ſtrongly recommended by others, but they all in general frequently prove ineffectual, except in a chance

chance Caſe where the Diſeaſe is moderate and recent.

However I muſt for the Good of the Publick, at leaſt in theſe Parts, recommend the Uſe of the Flowers of a Shrub, which is frequently found growing in many Parts of this Iſland, and has been found by repeated Experience, to be much more effectual in the Cure of this very troubleſome tho' ſeldom dangerous Diſorder, than any of the above-mentioned Noſtrums; and is ſaid, by ſome Perſons, to have ſucceeded when the Mercurials in various Forms have failed, for which Reaſon I ſhall deſcribe this Shrub here below *, that it may be more publickly known, and brought

* Sir *Hans Sloane* has deſcribed this Shrub in his Nat. Hiſtory of Jamaica, and calls it, *Juglandis folio, fruticoſa, ſiloquoſa, foliis pinnatis, coſta media membranulis utrinque extantibus alata, ſiliqua quadrangula alata:* And is here vulgularly called the *French Guava Buſh*; tho' it is nothing of the Nature of a Guava, nor any Similitude to it, except its Leaf, which much more reſembles that Leaf, than it does the Walnut.

This Shrub is an annual Shrub, and uſually riſes to the Height of four, five, or ſix Feet high; and is of the Claſs of the *Heptandria Monogynea* of *Linnæus:* It has many ſmall woody Branches, its Leaves ſtand on ſhort Stems oppoſite to each other, and are ſhaped like the Leaves of the Guava-Buſh; *(malo punicæ affinis Pomifera* of Sir *Hans Sloane)* the Flowers are many, and ſtand on the Ends of the Branches, near to each other, which ſeem to form one oblong large Flower, of an Orange-yellowiſh Colour, and an uncommon Shape (to which I think the Botaniſts have not given a Name) which afterwards open and are a little more yellow: The Perianthum conſiſts of one large Orange-coloured Petal, and five more on the Side next the Stem which are ſmaller, and

brought into more frequent Uſe: They uſually rub the Parts affected with the Impetigo, with the whole Flower, or with the Flowers reduced into a fine Pulp in a marble Mortar, very well for two or three Nights, and again afterwards if any Spots or Roughneſs remain or return, and it ſeldom or never fails to remove and effectually cure this troubleſome and very uneaſy Diſeaſe; eſpecially if the above Pills and Drops are taken at the ſame time, tho' the Diſeaſe be inveterate and obſtinate.

and of a bright yellow Colour, and ſeem to make a Part of the Corolla: The Corolla conſiſts of five Petals within the Perianthum, of a bright yellow Colour when open, and of an ovato-lanceolate Figure: The Stamina are ſeven, two larger ſhaped like the Seeds of the Fœniculi dulcis, but a little larger, a third ſlenderer and ſomewhat longer, and four ſmall ones at the Bottom of the Calyx. The Piſtil is much longer than the Stamina, and is curvated downwards: The Germen is long and of a ſquare Figure, the Style ſomething ſhorter, and the Stigma ſmall, conſiſting of one ſmall Aperture.

The Fruit is the Piſtil enlarged into the Form of a long Pod, four, five, or ſix Inches long, with a Wing running on each Side of the Pod, from one End to the other, which gives it a ſquare Figure, and is firſt green but when ripe of a brown blackiſh Colour, and contains a great Number of ſmall flattiſh cordated Seeds, of a dark brown Colour, with Semi-valves between each.

And as neither the Name which is vulgarly given it here, nor yet that given it by Sir *Hans Sloane*, are proper or ſuitable, ſhall we call it Ἀντιλειχήν, *Antileichen*, as it expreſſes its medicinal Virtues?

FINIS.

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MED. CHIR. SOC. ABERDEEN.

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